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PATHOLOGICAL RESEARCHES,

ILLUSTRATIVE OF THE

DISEASES

WHICH ARE MORE PARTICULARLY INCIDENTAL TO

COMMERCIAL LIFE.

By JOHN ALEXANDER, *M.D., Manchester.*

(Continued from page 325.)

CASE 5.—On the evening of July 30, 1834, I was summoned to one of our hotels to see a person who had just arrived from Carlisle, and there found a young man, æt. 31, whose case presented the following features:—Considerable emaciation of the whole frame, partial inability to raise himself into the erect posture, and complete want of power to sit up for any length of time; pallid, sunken countenance; speech slow, weak, and rambling; tongue clean; appetite none; pulse 90, feeble; bowels regular; no pain; cough; distinct uneasiness; in a word, specific complaint, beyond the mere sense of exhaustion.

In a half connected, incoherent, drawling manner, he gave me the following further statement:—From the age of nineteen to twenty-four, he had been a clerk in a London mercantile house, where he had led what is termed a "town life," and entered into every species of dissipation, without at the time experiencing any apparent injury to his health, devoting himself, during certain hours, with great zeal to business; although rarely inebriated, he had drunk a great deal, had held much intercourse with the other sex, and seldom retired to rest until very late hours. Since that time he had been comparatively steady, and had been actively occupied as traveller for an extensive establishment in this town, and it was not until twelve months ago that he began to feel his constitution sensibly giving way. During the last month he had lain at Carlisle, gradually becoming weaker, and quite unable to attend to his business. It was with considerable difficulty that he had been able to come on to Manchester.

A composing draught in some port-wine negus was given to him, and, on the succeeding day, the following measures were commenced. Rest on a hair mattress; generous diet, embracing animal broths, jelly, wine, &c; external frictions over the course of the whole spine, and the internal use of bark with nitric acid. These remedies, fairly tried for three weeks, appeared only slightly to retard his decline; for, although free from any tangible complaint, he made no way, but, rather, gradually became weaker. Under these circumstances, abstinence from medicine, removal (chiefly by water) to his native air, and a milk diet, were suggested as affording him a dernier chance. Three months afterwards I was informed of his decease.

Remarks.—The preceding case of decline is an example of premature decay of the frame, not unusual in a commercial community. During the last ten years I have seen several such cases,—in one material point, however, differing from the interesting case just related. In the majority of such instances, there is either tubercular degeneration in the lungs or liver; purulent depots in some of the cavities or joints; affection of the serous or mucous membranes; in a word some concomitant, definite, morbid action, giving a local character, or prominent feature, to the case. In the example under consideration there were, emaciation, debility, and sinking, but no pain, no local obstruction, no prominent symptom. The features of the case were negative. *The whole cerebro-spinal nervous system, however, was prostrate;* and whenever that is the case, as evidenced by mind and body equally weakened, the prospect of recovery is being cheerless. So long as the mind of an invalid bears up, the body, however weakened, if not organically affected, may regain its strength, especially in a young person, the energizing influence of the former, markedly aiding the renovating efforts of nature; but not so, according to my experience, where both are prostrate. Commercial pursuits, very zealously followed, in themselves undermine the constitution, although for years apparently exercised by many with impunity. When these are accompanied by dissipation and

excesses during the hours which should be allotted to relaxation and repose, is it matter of surprise that in many instances they pave the way to an early grave?

Case 6.—A merchant, residing in the outskirts of the town, ætat. 42, consulted me in July 1832, under the following circumstances. He had for eighteen months perceived himself to be very gradually losing strength and flesh, although without any assignable cause, or particular complaint. He farther stated, that his spirits, naturally equable, had for some time been unaccountably depressed, and he added that he now found himself unequal to his duties (very protracted as regards hours, though not laborious), being languid, listless, and indisposed to exertion. The circumstance, however, most alarming to himself, and more particularly leading him to seek professional advice, was this; he had, of late, occasionally found, whilst engaged in a conversation or argument, his memory, or, rather, his mind, suddenly and completely, though momentarily, suspended.

Upon inquiring into the state of the various functions, I was told that his appetite was, and had been, very indifferent, that his bowels were habitually constipated, and his urine was scanty and high-coloured. The pulse was regular, but weak; skin dry and cold.

The treatment in this case adopted, was as follows:—He was ordered an ounce of the compound decoction of aloes, forenoon and afternoon, with an aloetic myrrh pill at bed-time, and recommended to take a couple of hours daily exercise on horseback, and a tepid-bath twice a week. To discontinue port wine, and take old sherry in its place.

In the course of a fortnight he was sensibly improved. His bowels had been daily and fully unloaded, without being inconvenienced by the purging of the medicine. His riding had lessened the number of his business hours, and afforded him, latterly, pleasure, although at first the prescribed time and mode of exercise had proved irksome and fatiguing. During another fortnight the same measures were persevered in.

The purgatives were now administered less frequently. A preparation of iron (the *mistura ferri*) was commenced, and a long intended visit to Leamington was put into effect. Under this mode of proceeding, he regained both his bodily strength and his vigour of mind, but since that time he has more than once experienced slight relapses, for which the same measures have again, with some modifications, been resorted to.

Remarks.—In the selection of the preceding cases, and in the observations made thereon, one simple object has been kept in view, viz., that of practically illustrating the mal-effects of *undue exertion*, either physical or moral, upon the brain, the nervous system, and the sensorial organs generally. Additional examples of the evil resulting therefrom might with ease be given. This, however, is unnecessary, provided the principle suggested by those already adduced, be only admitted and acted upon. We shall, therefore, proceed to a few general remarks connected with this portion of our researches.

It is but too much the custom to regard the human mind in very exclusive points of view. Half the world considers mental exercise as an independent non-organic operation, theoretically imagining, or, by their conduct, practically inculcating, that mental application may be carried to an almost indefinite extent without injury to the brain. This is a sad mistake: cerebral excitement operates in the discharge of a function which, like all other organic offices, if moderately exercised, may be beneficially exercised; but, carried to an undue extent, it becomes the source of many unsuspected evils. Provided evidence of general bad health supervene, with lassitude of thought and feeling, is the error necessarily discovered? No, although it might have been predicated that, sooner or later, such evidence would arise, and the symptoms, when present, are very characteristic. The *effects* are mistaken for the *cause*, and we daily hear of bilious and nervous derangement, whilst the real source of mischief remains unsuspected, overlooked, and unremoved.

Whatever, by metaphysical speculators, the *mind* may be termed—whether an *aura*, or an *essence*,—a superadded independent *principle*, or an organic function—*this* is certain, that it is endowed with *sympathies* as numerous as the various bodily functions which it accompanies. In childhood the brain is imperfect in structure; equally so is the mind: in adult life the intellect is mature; so is the cerebral organization; and in old age the bodily frame and mental powers are seen to gradually decline together. From this close and universal sympathy it results that any mental exertion carried beyond a prudent extent must lead to a correspondent bodily injury, of greater or less extent. Observation substantiates this fact; prudence should enforce its application.

The doctrines of phrenology, although embracing much to create a smile in the face of philosophy, contain within them truths which the metaphysician will not find it lost labour to examine. It is true that the surrounding crust is considerable, but the enclosed ore is of commensurate value. Accustomed to see, to analyze, and impartially to appreciate, mental phenomena, as the results of cerebral operation, medical men have sometimes been charged, by persons of hasty judgment, with favouring the chilling doctrines of a cold materialism; and the simple circumstance of

their asserting *the dependency of sound functional action in the brain upon sound cerebral structure*, has been adduced as sufficient evidence of the truth of the imputation. Yet is it so? Has "the proper study of mankind" that tendency? Has beholding obvious design in organic structure and action that effect? Assuredly not, but quite the reverse; the charge is as unfounded as it is uncharitable. In the prosecution of his labours, the medical inquirer beholds with interest the reciprocal actions or influences of mind and matter. He sees a disordered stomach revolutionizing an amiable temper. He beholds the result of philosophic labours distorted, and rendered futile by mental aberration, and this connected, as he afterwards finds, with cerebral disease. He witnesses the prostration of bodily strength which follows undue mental occupation; and in such recognition he traces,—what? The physical influences of a material frame upon an immaterial principle. Does he, however, bewilder himself with attempts to analyze the connection of the two, or the essence of the latter? No; he understands not, he presumes not, to investigate a subject, so evidently uncognizable by human intellect. "They who have made the highest advances in true science," justly remarks the accomplished Dr. Abercrombie, "are the first to acknowledge that the highest achievement of human wisdom is to advance to that line which is its legitimate boundary, and there contemplating the field that lies beyond it, to bend in humble adoration before a wisdom which it cannot fathom, and a power which it cannot comprehend."

But to return from this digression. Persons may remark,—much having been said about undue mental exertion in the preceding observations,—that we are desirous of knowing exactly what constitutes a due, and what an undue, degree of thought. The query is easier put than answered. Men's minds like their bodies are capable of very different degrees of labour. That which is light and easy to one person another may feel exhausting and oppressive. The definition of what constitutes excess in eating and drinking (extreme cases excepted) is equally difficult, the powers of digestion, as well as the legitimate calls for support, differing very materially in different persons. So it fares with the mind. A great deal in these matters is admittedly relative. How, then, is the point to be resolved? There is but one way of determining it, and that is by the exercise of individual observation and common sense. A few hints respecting particular and frequent sources of this mischief, however, may assist the judgment.

Not combining sufficient bodily exercise with mental occupation is a very common error in a commercial community. An extent of mental exercise which would otherwise prove very injurious, can be borne with impunity if alternated with exercise. Whatever the appliances of a man's station may be, however agreeable the nature of his pursuits, however well regulated his general habits, unless due exercise is practised, bad health must ensue. By the commercial man this truth should especially be remembered, because his occupations are particularly calculated to lead him to overlook it. An equally frequent error is that of thinking too long on one subject. If the arm be moved continually for fifteen minutes in one direction, the limb will be more fatigued than if it be exercised in various efforts for an hour. Uniformity of employment proves not more prejudicial and exhausting to the bodily than it does to the mental powers. To quote an extreme case in illustration, the celebrated Boerhaave tells us, that having intensely studied for a few days on one subject, he induced such a degree of lassitude that he lay for some time in a deathlike condition.

Another error in commercial life consists in not devoting a certain portion of time exclusively to rational and enlivening amusement. There are, however, grave and well-meaning people who may question the assertion that there is wisdom even in wearing the cap and bells occasionally; at all events there is in every case an absolute necessity for the serious workings of the mind to be occasionally suspended and superseded by light recreations, passive reveries, or amusing studies.

Again, in a life of business it is too much the custom to make hasty meals, and then completing the evil, by resuming commercial duties without the lapse of a sufficient interval. Thus the constitution receives a double shock; digestion being interrupted the frame ceases to be nourished as it otherwise would be, and the mind is summoned to work when the energies of the frame are, or at least ought to be, employed in another direction. The consequence inevitably follows that sooner or later the brain and nervous system suffer severely.

Finally, on this part of our subject, if those who are in business value health at the proper time, that is, before they have lost it, they will act upon these unquestionable truths, that exercise, alternation of labour, the apportionment of a due time for meals, and a certain extent of light amusement, are as indispensable for intellectual as for corporeal health, and that, exactly in the same ratio as they are duly observed, will be the chance of continued health and length of life.

TARTAR EMETIC IN DELIRIUM TREMENS.

To the Editor of THE LANCET.

SIR: Having recently removed from a country village to the largest market town in Westmoreland, I did not receive the LANCETS containing my own contribution, or the one in which are contained the strictures of Mr. Burrow, until this week, otherwise I should have replied to the latter sooner.

The patient whose case I recorded has been under my care frequently, and at different periods has taken the common remedies usually prescribed in delirium tremens, but invariably without any salutary effect; and having observed that tartar emetic in pneumonia and other affections of the chest was exceedingly efficacious in allaying inflammatory action and nervous irritability, I was induced to try it in this case, as there is no disease in which the nervous irritability is more conspicuous, or in which the ordinary doses of medicines have less effect.

Delirium tremens is so common a disease, and the usual treatment is so well known, that had not my method differed materially from that of others, I should not have published the case. Mr. Burrow commences by stating that my patient was fortunate in escaping the poisonous effects of such large and repeated doses. It appears to me that Mr. Burrow is utterly ignorant of the effects of large doses of emetic tartar; if he will refer to the review of Lepeletier, on emetic tartar, in the 2nd No. of the *British and Foreign Medical Review*, he will find Rasori gave it in scruple, and even in drachm doses, in all inflammatory affections. In fact, at page 421 is mentioned a species of delirium tremens in which opium alone had no effect, but in which, by a combination of tartar emetic and opium, he invariably cured the disease. As to the *modus operandi* of the drug, I should be inclined to call it, in large doses, a narcotic, or, as Rasori, Tomassini, and others, call it, a counter-stimulant, destroying the inflammatory diatheses. Dr. Graves states that it is his firm opinion that it exerts a narcotic effect on the system, and that it is this which makes it so valuable a remedy in treating the sleeplessness of fever and delirium tremens. Your correspondent refers me to Beck, in which are related several cases of poisoning from tartar emetic; but on referring to the work I find that the author has not come to the conclusion that it is a virulent poison, but merely imagines that it *must* be so in large doses, although he quotes a case of a person taking many drachms in the course of the day with impunity. Dr. Ryan says that this medicine is given in repeated doses, to the extent of sixty or eighty grains, in pneumonia, without any poisonous effects, and this I consider to be a good illustration of the different effects which medicines have in a state of health and of disease. In corroboration of this opinion I may give the following quotation from Dr. Thomson's observations in the "Cyclopedia of Medicine," under the article *emetics*:—"In mania tartar emetic is preferable to all other emetics, but it requires to be prescribed in much larger doses than in most other diseases, a scruple producing little or no effect whilst the congestion remains." Your correspondent asserts that it is probable that a considerable portion of the preparation never entered the stomach. This requires no reply; the supposition that the medical attendant should allow this, is sufficiently absurd to be its own answer. He also conveys to the readers of THE LANCET an imputation respecting my knowledge of the properties of tartar emetic, in not the most gentlemanly manner, though it would have been well for his professional reputation had he possessed more acquaintance with its powers before criticising the successful treatment of an extraordinarily difficult case. Medical men ought not to neglect to use powerful remedies in severe and dangerous diseases, if mild ones fail to effect a cure.

Sir, in conclusion, I have to thank your correspondent for his kindness, in recommending to my attention a book so little known as Dr. Copland's Dictionary, and with the hope that I shall be more edified by that work than by your correspondent's future remarks, I remain, Sir, your obedient servant,

WILLIAM GREENWOOD.

Kendal, June 13, 1836.

REPLY FROM BARON HEURTELOUP.

To the Editor of THE LANCET.

SIR: The case of Colonel Rankin, to which it seems your correspondent (signing himself "VERITAS") alluded in THE LANCET of the 14th of May, is grossly misrepresented in every circumstance. Dr. Crombie, to whom I feel much indebted for coming forward, and wishing to see justice done, was perfectly right in asserting that the statement of *Veritas* "must have originated either in ignorance or malignity." The facts of Col. Rankin's case have already appeared in your Journal. This operation is well known to have taken place between four and five years ago, quite among the first examples of the application of percussion, and yet it is *again* brought forward, teeming with the most glaring untruths, as a *recent* case. This, Sir, is very

far from being either courteous or fair; and however satisfactorily your correspondent might have authenticated his communication, I am not at all surprised that he did not dare give his signature to so many misstatements.

As regards any other case you may allude to, Sir, I am very happy to have an opportunity of informing you and your numerous readers, that I have in store a numerous collection yet unpublished, some of them replete with interest and instruction; these I will lay before the medical public, with such remarks and conclusions as may be profitable to science and humanity. To terminate, I will observe that I have nothing to divulge that *is* not,—or, at all events, *may* not,—be known, as I act invariably in the presence of, or conjointly with, professional gentlemen. As regards the full and scientific description of the details of my practice, I wish to embody with them much that may throw very necessary light upon a most important and deeply-interesting subject.

I consider it incumbent on me to reply to what has been said, but had preferred saying nothing, in pursuance of my practice and determination, and as I intend doing for the future, when there are so few claims to attention as in the present instance, where there is too much that is personal, to be considered scientific. I have the honour to be, Sir, your obedient servant,

BARON HEURTELOUP.

4, Queen Ann-st., Cavendish-sq.,
June 13, 1836.

DR. INGLIS'S CASE OF DOUBLE FRACTURE, CURED WITHOUT SPLINTS.

To the Editor of THE LANCET.

SIR: My attention, as you anticipated, has been attracted by a letter which you inserted in THE LANCET of May 28th,—though, had it not been for the note which you kindly adjoined, I should not have noticed the communication, inasmuch as it is anonymous. I now beg to say, in reply to your remark, that the language in my case-book (from which I extracted the report) is as follows: "I found that the left femur was fractured in two places, one near its lower third, and the other just below the greater trochanter, *at* which place several splinters of bone could be distinctly felt." This was on the 1st of March 1835. Then, on the 9th of March the report runs thus: "Still improving; little or no pain. The lower fracture *appears* to have united; there is a distinct thickening over the site of it. On examining the upper fracture, the splintered *pieces* of bone are felt rubbing against each other with the usual grating noise." The interpretation of which is, according to the anonymous critic, rendered thus: "*No* restorative action had commenced!" "Yet," he adds, "on the *twelfth* day we are informed that both fractures were united." Now, is such an induction fair? Does my language warrant it? But besides, who would suppose that nine days could transpire, everything going on so well, without restorative action commencing, and that in the next two days this action would be completed? Certainly no one but the writer of that letter himself.

The critic concludes his short stricture by saying, "This strikes me as a little unusual; at least it is so in Dublin." And such cures must be "unusual" in Dublin, and in every place else, so long as it is *usual* to treat fractures by the old mode of splinting and tight bandaging. Cures I have no doubt will continue to be protracted for the space of three or four months which might be effected in three or four weeks by the adoption of that line of practice which I shall ever feel it my duty to advocate. In one respect (but in one only) the anonymous M.R.C.S.I. reminds me of an illustrious surgeon, who in one of his discourses decries most vehemently those "narratives and drawings which stagger all belief, and are too wonderful to have any relation to practice, whilst he himself has helped to swell the catalogue of such a repository. I shall be glad, however, to hear of an Irish revolution in this department of surgery.

I am happy to add that my patient continues to move and run about without even a limp. In fact he feels as little inconvenience from the recent fracture, as if it had never occurred. I remain, Sir, your obedient servant,

JAMES INGLIS, M.D.

Castle Douglas, June 6, 1836.

OVARIAN DROPSY.

To the Editor of THE LANCET.

SIR: I send you the annexed brief statement of an interesting case, which I shall feel obliged if you will insert in the next number of THE LANCET.

I tapped a married lady yesterday, *ætat.* 49, for ovarian dropsy, which has been accumulating for six years, and drew off twenty quarts of thick chocolate-coloured fluid, weighing altogether exactly fifty pounds avoirdupois weight, the whole having been contained in *one single cyst.* The subject, previously to the appearance of the disease, was tall and thin, and of spare habit, and had had one abortion of six weeks date. The ribs are extended in a remarkable degree, and there is slight lateral spinal

curvature. The patient bore the operation without syncope, and is now doing well. I was assisted by my esteemed friend, Dr. Merriman. I remain, Sir, yours faithfully,

T. W. WANSBROUGH.

Fulham, June 7, 1836.

HYDRIODATE OF POTASH IN ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR: I have just perused the report of cases occurring in the *Westminster Hospital* inserted at page 381 of the last LANCET, and must confess that I feel a little astonished at the treatment adopted in them, and consider the rapid recovery under such treatment little less than miraculous. One or two of the cases, at least, appear to me to have been cases of acute rheumatism, arising from exposure to cold, seeming to have yielded to the magic influence of the hydriodate of potassa. I certainly have seen this medicine given in this disease; but it was in the chronic form, attended wtth thickening of the joints, unaccompanied by any acute inflammatory symptoms, which, it must be well known to the medical profession, sometimes supervene on the chronic form, from any exciting cause. To me it appears that these were fit cases for the use of the lancet, with other rigid antiphlogistic treatment. The first case narrated is that of Ann Wheeler, admitted May 24th. The report says, "She has great pain in all the joints; tongue loaded; pulse 120, hard, and full; skin hot and dry; face flushed; pain in the right side, with difficulty of breathing;" loss of appetite and excessive thirst. In this case, although symptoms of strong inflammatory action were present, requiring the antiphlogistic treatment I have above mentioned (as, I should suppose, the most proper), the hydriodate of potassa is given, and in the short space of ten days the patient perfectly recovers. I must therefore beg the favour that Dr. Roe, or the reporter of the cases, will mention the *modus operandi* of the medicine in these instances, as I have always been taught to consider iodine and its compounds as belonging to that class of medicines which are called "stimulants." The other ingredients of the mixture are only of secondary importance. My name in confidence I enclose. I am, Sir, your obedient servant,

A. S.

Kennington, June 13, 1836.

EXPERIMENTS ON LIVING ANIMALS.

To the Editor of THE LANCET.

SIR: Having been, from a regular perusal of your Journal, led to form a high idea of your character for general humanity, I venture, with a full degree of confidence, to call your attention, and that of your very numerous readers, to the cruel, and as I firmly believe it to be, the indefensible practice of performing experiments on living animals. I am quite aware that I shall be met by the argument of possible benefit to the nobler animal man, and perhaps the adage once applied to criminals may be adduced, "fiat experimentum in corpore vili." But I wish to deny that any link in the chain of creation is "vile," or that we are at liberty to inflict agonizing torments on the inferior tribes, for some hypothetical benefit to ourselves; and to assert roundly that, if we can only be cured by attempts at discovery through the torments of animals, we have no more *right, à priori*, to the adoption of such means, than we have to seek health by torturing our fellow men.

The particular instance which has called forth this appeal,—the poisoning of a cat by phosphorus, as mentioned in your number of Saturday, May 27,—does not include some of the more revolting circumstances attending such cases. But it revives the recollection of many such. And to you, as the advocate of the nobler qualities of the medical art, and to your conscientious readers, I submit the plain question, whether it be not a high offence to the great Creator, and a flagrant outrage against nature, to seek any kind of knowledge through such crooked paths. Nature, and common sense and feeling, dictate to us with tolerable certainty what are the legitimate uses of the animal creation. Certainly they lift up their voices against such maltreatment; and not the least part of the evil is, I think, to be found in the inevitable hardening of the heart of the experimentalist in such cases. For there can hardly be the redeeming influence which exists in performing operations on the human frame, where painful necessity offers the allevation of duty, as I think no one could ever have performed the former experiments without at least *a doubt* that he was doing a very unjustifiable act.

These brief considerations will, I hope, be followed up by the conscientious feelings of your readers. I may simply remark, in conclusion, that, even if the certainty of available discovery could justify oppressive cruelty, which I again beg to deny in the strongest terms, there was no such plea in the present instance. It bears the impress of wanton, and, therefore, decidedly cruel curiosity. There was nothing *tempting* in

phosphorus; no danger of its being taken for pleasure, like opium, because some mercenary quack professed to possess an antidote against it. I am, Sir, your obedient servant,

J. D. P., M.A.

London, June 8, 1836.

*** This expostulation is partly directed against a "practice" which does not exist. Our correspondent is not justified by facts in connecting this word with "experiments performed on living animals." British professors of medicine *very rarely* prove by such experiments that they feel themselves warranted in thus testing theories which hold forth a promise of ulterior benefit to man.

A BILL

TO PROVIDE FOR THE ATTENDANCE AND REMUNERATION OF

MEDICAL WITNESSES AT CORONERS' INQUESTS.

Preamble.—Whereas, it is expedient to provide for the attendance of medical witnesses at coroners' inquests, also remuneration for such attendance, and for the performance of post-mortem examinations at such inquests;

Be it therefore enacted by the King's most excellent Majesty, by and with the consent of the Lords spiritual and temporal, and the Commons, in this present Parliament assembled, and by the authority of the same,

(Summoning of Medical Witnesses.)

That whenever, upon the summoning or holding of any Coroner's Inquest, it shall appear to the Coroner that the deceased person was attended at his death, or during his last illness, by any legally qualified medical practitioner, it shall be lawful for the Coroner to issue his order, in the form marked *A* in the schedule hereunto annexed, for the attendance of such practitioner as a witness at such inquest; and if it shall appear to the Coroner that the deceased person was not attended at or immediately before his death, by any legally qualified medical practitioner, it shall be lawful for the Coroner to issue such order for the attendance of any legally-qualified medical practitioner being at the time in actual practice in or near the place where the death has happened; and it shall be lawful for the Coroner, either in his order for the attendance of the medical witness, or at any time between the issuing of such order and the termination of the inquest, to direct the performance of a post-mortem examination by the medical witness or witnesses who may be summoned to attend at any inquest.

Additional Medical Evidence, if the first be not satisfactory.

And be it further enacted, That whenever it shall appear to any six of the jurymen sitting at any Coroner's Inquest, that the cause of death has not been satisfactorily explained by the evidence of the medical practitioner who may be examined in the first instance, such six of the jurymen are hereby authorized and empowered to name to the Coroner any other legally-qualified medical practitioner or practitioners, and to require the Coroner to issue his order, in the form hereinbefore mentioned, for the attendance of such last-mentioned medical practitioner or practitioners as a witness or witnesses, and for the performance of a post-mortem examination, whether such an examination has been performed before or not, and if the Coroner, having been thereunto required, shall refuse to issue such order, he shall be deemed guilty of a misdemeanour, and shall be punishable in like manner as if the same were a misdemeanour at common law.

Fees to Medical Witnesses, and Funds for their Payment.

And be it further enacted, that when any legally-qualified medical practitioner has attended upon any Coroner's Inquest, in obedience to any such order as aforesaid of the Coroner, the said practitioner shall, for such attendance, be entitled to receive such remuneration or fee as is mentioned in the table marked *B* in the schedule hereunto annexed, and the Coroner is hereby required and commanded to make, according to the form marked *C* in the schedule hereunto annexed, his order for the payment of such remuneration or fee, and such order shall be addressed and directed to the overseers of the parish in which the inquest has been held, according to the general description of the said overseers, or to any one of them. And such overseers, or any one of them, is and are hereby required and commanded to pay the sum of money mentioned in such order of the Coroner to the medical witness afore mentioned, or his messenger, out of the funds collected for the relief of the poor of the said parish.

Fee not payable for a Post-mortem Examination instituted without Order from the Coroner.

Provided nevertheless, and be it further enacted, that no order of payment shall be given, or fee or remuneration paid, to any medical practitioner for the performance of any post-mortem examination which may be instituted without the previous direction of the Coroner.

Inquests on Bodies of Persons dying in Public Institutions.

Provided also, and be it further enacted, That when any inquest shall be holden on the body of any person who has died in any public hospital, or infirmary, or in any building or place belonging thereto, or used for the reception of the patients thereof, or who has died in any county or other lunatic asylum, or in any public infirmary or other public medical institution, whether the same be supported by endowments or by voluntary subscriptions, then, and in such case, nothing herein contained shall be construed to entitle the medical officer whose duty it may have been to attend the deceased person as such medical officer in such institution as aforesaid, to the fees or remuneration herein provided.

Penalty for neglecting to Attend.

And be it further enacted, that where any order for the attendance of any medical practitioner as aforesaid, shall have been personally served upon such practitioner, or where any such order, not personally served, shall have been received by any medical practitioner in sufficient time for him to have obeyed such order, or where any such order has been served at the residence of any medical practitioner, and it shall appear to any six of the jurymen that such order had come to his hands in sufficient time for him to have obeyed it; then, and in every such case, it shall be lawful for the coroner, at a request made by any six of the jurymen, and the coroner is hereby required and commanded, to issue his warrant, in the form given in the schedule hereunto annexed, marked D, to any constable or other peace-officer, to bring such medical practitioner at any time and place specified in such warrant, before the coroner and the jury, for the purposes mentioned in the said order; and in every case where any medical practitioner has not obeyed such order, he shall for such neglect or disobedience forfeit the sum of sterling, upon complaint thereof made by the coroner, or any two of the jury, or the constable who served the order, before any two justices having jurisdiction either in the parish or place where the inquest under which the order issued was held, or in the parish where such medical practitioner resides, and such two justices are hereby required, upon such complaint, to proceed to the hearing and adjudication of such complaint, and, if substantiated, to enforce the said penalty by distress and sale of the offenders' goods, as they are empowered to proceed by any Act of Parliament, for any other penalty or forfeiture.

SCHEDULE

A.—Form of Summons.

Coroner's inquest at , upon the body of . By virtue of this my order as Coroner for , you are required to appear before me and the jury at , on the day of , 18 , at o'clock, to give evidence touching the cause of death of , (and then add, when the witness is required to make or assist at a post-mortem examination), and make, or assist in making, a post-mortem examination of the body, and report thereon at the said inquest.

(Signed) , Coroner.

To

Surgeon (or M.D., as the case may be).

B.—Table of Fees.

1. To every legally-qualified medical practitioner for attending and giving evidence under the provisions of this Act, at any Coroner's-inquest whereat no post-mortem examination has been made by such practitioner, the fee or remuneration shall be *One Guinea.*

2. For the making of a post-mortem examination of the body of the deceased, and for attending to give evidence relative thereto, the fee or remuneration shall be *Two Guineas.*

C.—Coroner's Order for the Payment of Medical Witnesses.

By virtue of an Act of Parliament passed in session of , holden in the , entitled , I, the coroner of and for , do order you, the overseers of the parish [or township as the case may be], to pay to the sum of (*one guinea* or *two guineas*, as the case may be), being the fee (or fees) for the attendance of the said , at an inquest holden before me this day of , 18 , upon the body of about the age of , who was found dead at (or other particulars or description), and at which said inquest the jury returned a verdict of .

(Signed) Coroner.

Witnessed by me , of , a juryman at the said inquest.

To the Overseers, &c. &c. &c.

D.—Warrant to Constable to enforce Attendance of a Witness.

Whereas I have been required by six of the jurymen sitting in inquisition upon the body of (with other description, as the case may be), to issue my warrant for the bringing of to give evidence before me and the jury, touching the cause of the death of the deceased person. I therefore do authorize and order you to take into your custody the said wherever he may be found, and to bring him before me and the jury at an adjourned inquest to be holden at , on the day of , 18 , when and where I shall be informed that you have the custody of the said ,

and, you are hereby authorized and commanded to hold him in safe keeping until the examination of the said , at the said adjourned inquest, shall have been concluded. And this warrant shall be your sufficient authority.

Signed. sealed, and delivered, in the presence of the jury, by me,

Coroner.

To , Constable for .

FIRST ANNIVERSARY MEETING OF THE

EASTERN PROVINCIAL MEDICAL ASSOCIATION.

(Abridged from the Suffolk Chronicle.)

THE first annual meeting of this Society was held on Monday June 6, in the Council Chamber, at Ipswich, and was attended by upwards of sixty members of the Faculty, among whom we noticed,

Mr. Armstrong, Melton.
Dr. Baird, Ipswich.
Mr. Bartlett, ditto.
Mr. Beales, Halseworth.
Dr. Beck, ditto.
Mr. Bedingfield, Stowmarket.
Mr. Bree, ditto.
Mr. Bullen, Ipswich.
Mr. Chapman, Ditto.
Dr. Chevalier, Aspall.
Dr. Cox, Yarmouth.
Mr. Creed, Bury.
Mr. Crosse, Norwich.
Mr. Crowfoot, Beccles.
Mr. Denham, Wickham.
Mr. Francis, Ipswich.
Mr. Growse, Bildeston.
Mr. Growse, Hadleigh.
Mr. Hammond, Ipswich.
Mr. Jeafferson, Framlingham.
Mr. Macintyre, Bury.
Sir L. Maclean, Sudbury.
Mr. Mines, Diss.
Mr. Mumford, Ipswich.
Mr. Moore, Woodbridge.
Mr. Muriel, Wickham.
Dr. Nunn, Colchester.
Mr. Sampson, Ipswich.
Mr. Smith, Bury.
Dr. Stevens, Ely.
Mr. Tomkins, Witham.
Mr. Waylen, Colchester.
Dr. Wharton, Diss.

Dr. BAIRD was called to the chair, and offered them his sincere thanks for the honour. The formation of this Association, as a section of the larger provincial one, and the ready support which it met with, had been loudly cheered by their brethren in other parts of the kingdom, as offering further proof of the energy and zeal for the promotion of science, which characterized the members of the medical profession; and so fully had the plan of co-operation in the provinces been recognised, that the Provincial Medical Society, with the addition made to it by this Society, had, in the brief space of four years, numbered nearly 800 members. (*Applause.*) Now, as no one could have studied his profession without perceiving how far removed it was from that degree of perfection of which it was capable, so might he fairly expect incalculable advantages from the united labours of this numerous and effective body. "In the revolutions of medical science," said a very high authority, "there had been for some years a progressive and remarkable change of opinion, in regard to the mode of conducting medical investigations. There appeared to have been a tacit but very general admission of the fallacy of medical hypotheses, and the precarious nature of general principles in medicine; and there seemed to be an increasing conviction of the indispensable necessity of founding all our observations in medical science, upon an extensive and accurate acquaintance with the pathology of disease. The facts which were required for this purpose, could be derived only from the contributions of practical men, and it was of the utmost importance that such persons should extensively record their observations, as the basis on which to found legitimate principles in medical science." With the knowledge, then, that for the essential part of their science, they were entirely dependent upon well-conducted experiments, and close and faithful observation, and that it was in the power of any person who pursued his profession with diligence and zeal, to add something to the common stock of medical knowledge, he trusted the sentiment of each member of that association would be "quantacunque fuerint aliorum conamina, semper existimavi mihi vitalis auræ usum frustra datum fore, nisi et ipse, in hoc studio versatus, symbolum aliquod, utcunque exiguum, in commune medicinæ ærarium contribuerem." (*Applause.*) But another most important object which the founders of that Society had in view, was the effecting of that union and harmony among the cultivators of medical science, which ought ever to prevail between men of similar sentiments, and similar pursuits, who were engaged in the exercise of a most liberal profession. Having made these remarks, he for one moment adverted to the loss they had sustained in the death of one of their members, Mr. Helsham, of Woodbridge, a highly respectable member of his profession, and a blessing to the community among whom he practised. He would not further trespass on their time, but would call upon Mr. Crosse to read the report of the Council.

Mr. J. G. CROSSE, the Honorary Secre-

tary to the Association, then read the report of the Council. It stated that the number of signatures to the original requisition, and the numerous attendance of the profession at Bury St. Edmunds in September last, indicated that an ardent spirit was abroad for the formation of an extensive Medical Association in the eastern counties. The anticipations had been most amply realized. The number of subscriptions paid to the Society's account is 161, and several gentlemen are enrolled, from whom no remittance has yet been received, owing to the difficulty of collecting so small an amount; the total of its members is now 170. In the history of every enlightened class of society it has been found, that assembling its members together has given a fresh stimulus towards its improvement, and the medical profession is so rich in resources, as to profit by such intercourse above most others. Several papers were read at the first meeting of the Council, which are reserved for publication, and others are now ready, some of which will be laid before the present meeting. In order to secure further services, the Council recommend that each general meeting should appoint several members to report upon some subject referring to the climate peculiar diseases, statistics, or natural history of the district. The Council hope the prospect is held out "of effecting a junction with the parent Provincial Association for the publication of transactions, and holding a general meeting once in a few years," an arrangement evidently combining more of the advantages of union than if the societies were one, and still retaining to each the chief privileges of a separate existence. In conclusion, the Council beg to announce that, Mr. Bedingfield of Stowmarket, Mr. Macintyre of Bury, Mr. Jeafferson of Framlingham, Mr. Martin of Holbrook, and Mr. Denham of Wickham-market, have drawn up a report on the "Medical Management of the Poor," which will be read towards the close of the proceedings, opening a field for discussing a subject generally acknowledged to be of vital importance to a great portion of the practitioners in the provinces. (*Applause.*) The Report was here read. (See page 394 to 398.)

Mr. Bree, of Stowmarket, was of opinion that the report could not be received, on the ground that it cast odium on those medical men who had attempted to form medical clubs. He had taken steps to form one in his own neighbourhood, from the conviction in his own mind, that it was the intention of the Poor-Law Commissioners ultimately to establish institutions of a similar nature amongst the poor, but on a lower scale than was practicable.

Mr. Macintyre (who read the report) said, that nothing was further from the intentions of the gentlemen who had drawn up the report than to produce dissension in the profession; and until the present moment, he had not known that Mr. Bree had taken a single step to establish a club.

Mr. Bree said, that this explanation was perfectly satisfactory so far as he was concerned.

Dr. Cox, of Yarmouth, inquired whether the gentlemen who drew up the report alluded only to medical clubs, or whether their remarks referred to dispensaries established on the same principle as the one in existence at Coventry.

Mr. Macintyre replied in the affirmative; and asked whether it would meet Dr. Cox's views if he expunged the passage which alluded to dispensaries.

Dr. Cox said it would; and Mr. Macintyre struck it out.

Mr. J. G. Crosse briefly addressed the meeting. He differed in opinion from nine-tenths of the report. He was a strong advocate for the formation of medical clubs, and he recommended the establishment of self-supporting dispensaries in the larger towns.

A code of laws drawn up by a Committee was read by Dr. Beck, and adopted by the meeting.

A vote of thanks was given to Mr. Crosse, and a request that he should continue his services for the ensuing year. That gentleman assured the Association that he would perform the duties which necessarily devolved upon him as their honorary secretary.

Mr. Jeafferson, of Framlingham, read an elaborate and well-written essay on *Ovarian Dropsy*, for which he received the thanks of the Association.

After a brief discussion, a vote of thanks was given to the gentlemen who drew up the report.

Mr. Crosse moved the thanks of the meeting to Dr. Baird, for his able and kind attention to the business of the day, which was carried by acclamation.

Dr. Baird replied, and the meeting separated.

REPORT

OF A COMMITTEE OF THE

EASTERN PROVINCIAL MEDICAL ASSOCIATION,

ON THE

MEDICAL MANAGEMENT OF THE POOR.

1. At the meeting of the Council of this Association, at Norwich, on the 30th of March last, a resolution was passed requiring that a report should be drawn up on the medical management of the poor, and in accordance with that resolution

your Committee submit the result of their observation and inquiry. They must, however, be permitted to premise, that the subject upon which they are required to report, opens upon them a much wider field than they could, conveniently for the time of the meeting, or, indeed, advisedly in other obvious respects, undertake to traverse. Under the extensive head thus submitted to your Committee, might be fairly embraced, for instance, the altered state and condition of the poor as ameliorated or aggravated by the practical operation of the new Poor-Law Act. But your Committee feel, that the discussion of that topic would lead to remarks which might be thought invidious, if not injurious, and, without benefiting the poor, withdraw attention from that branch of the subject which it is the business and the duty of this meeting to discuss, namely, the influence which the operation of the new Poor-Law Act, and its contingent or auxiliary establishments, has, or is likely to have, on the medical profession.

2. Your Committee cannot proceed further, without expressing their regret at the means which have been so extensively employed to depreciate the services and lower the dignity of the profession in public estimation. In their reports upon medical contracts, the Commissioners have also resorted to representations the most unfair and disingenuous, in illustration of which your Committee beg to refer you to their statement, "that in fixing the salaries of the medical officers, they have taken care not to *exceed* the aggregate amount of the salaries paid previous to the introduction of the new Poor-Law Bill;" thus leaving it to be inferred, that they had made the aggregate amount of those salaries the standard of their scale of remuneration, when, in fact, they have greatly reduced them. If, in the operation of the old system, the practice of farming out these parishes was in many repects highly objectionable—if these engagements afforded the parish patient no adequate relief, and the conscientious practitioner scarcely a modicum of remuneration for his services, what must be the situation of the medical man under the enactments of the new Poor-Law Bill, under regulations which afford even less compensation, while they demand far more extensive services?

3. Your Committee have a document in their possession which affords a fair example of the ratio in which our professional services are remunerated. A surgeon to one of the Unions writes thus:—"I have just finished one quarter under the new contract: upon a fair calculation, I find that the medicines cost the full amount of the salary, and that we have just nothing at all for our time, trouble, horse-keeping, midwifery, &c. I trust that some legislative interference will be adopted to put an end to such gross impositions."

4. Another subject of complaint is the arbitrary manner in which, since the formation of the Unions, the number of medical men have been diminished; a measure which has rendered it necessary for surgeons to extensive districts to engage assistants, thus making that complicated which ought to be most direct and simple, hazarding equally the safety of the patient, and the character of the medical attendant, and rendering the responsibility at the same time evasive and twofold: under this system instances have occurred in which patients have sickened, suffered, and died, without a medical man ever having entered their chamber.

5. It has been asked, and it may perhaps be again inquired, why, subject as the office is to the various grievances of which we complain, we come forward as applicants for, or desire to hold, the situation of parish surgeon?

6. Unless this question arises from ignorance or inconsiderateness, it proceeds from a system of mockery and insult; our answer is, and we think it must be to every reasonable person both satisfactory and conclusive, that we have no other means of protecting ourselves from the introduction into the very heart of our connections, of unprincipled or inexperienced practitioners, the latter of whom having just passed their probationary studies, would be far better employed in acting under the direction and assisting the labours of those who are more advanced in years, and have more practical experience.

7. Your Committee are aware that it has been urged that the interests of the medical profession, are in safe keeping with the local Boards of Guardians—that these Boards being composed of persons in daily intercourse, and on the best terms of private friendship, with the neighbouring medical practitioners; and having, moreover, a natural interest in the well-being of their medical attendants; it is not to be presumed, that in their public capacity, they would inflict positive injury upon those to whose skill and attention they are indebted for comfort and relief in the hour of sickness and domestic trial. Your Committee regret that although the premises be indisputable, and the argument plausible, the inference is not borne out by fact or experience. They have uniformly remarked that the principle of reduction in the rates, has wholly set aside the consideration of the claims of the medical practitioner; and they cannot, with any degree of confidence, recommend their professional brethren to rely on Boards of even their best friends, for adequate professional remuneration, or even courtesy, in any matters connected with the medical management of the poor. It is by a re-

spectful, yet firm appeal to the legislature alone, that redress is to be obtained, and a profession, not the least honourable and useful in the state, saved from positive degradation and ruin.

8. Your Committee have before them the first annual Report of the Poor-Law Commissioners, and they consider that they should be insensible to the duty required of them, and careless of the credit of their profession, if they did not call upon this meeting to disprove and contradict some of the assertions therein contained—assertions not more derogatory to the profession in their general application, than at variance with fact. "We found it a practice," says the Report, "*in the great majority of instances*, for a medical man to contract with the parish, to supply the settled paupers of the parish with medical attendance for a small fixed sum, on the expressed or implied condition, that he should be allowed to make whatever charges he pleased for his attendance and treatment of non-parishioners, under suspended orders of removal, or an order of medical relief by the overseer. When the patient has recovered, he is sent home to a parish with a bill for medical attendance, including charges for medicines at the highest rates. Against these charges, the distant parish to which the pauper belonged had no adequate protection. The pauper was exposed to the danger of being supplied with medicines considerably beyond what was required for his proper treatment. Instances have come to our knowledge, where, in large populous parishes, the profits of attendance upon such paupers have been upwards of 300*l.* per annum. The inferior officers have been fee'd by the medical officer, to search out and give him information of cases of this description."

9. Your Committee are not prepared to deny that instances may be adduced of medical men losing sight of their professional character under such circumstances, but they are ready to contend that the assertion, that such rapacity is chargeable in a "majority of instances," is equally unwarranted and unworthy. Your Committee trust that the present opportunity of directly contradicting this ungenerous and unfounded allegation, will not be permitted to pass, but that in unequivocal terms, this meeting will mark its sense of the injustice of the assumption, and its reprobation of the employment of a statement so much at variance with fact to deteriorate the condition of the respectable medical practitioner. Your Committee the more strongly recommend this course, because it appears to them, that upon the discreditable instances, unwarrantably magnified into a "majority," the Commissioners mainly relied for effecting the measures so directly calculated to injure and subvert the profession. They marvel, however, that after this disgraceful estimate of the *majority*, the Commissioners should add in their report, "We may be sure that the medical practitioner will consider the interests and advantages of his profession."

10. In reporting on the medical management of the poor, your Committee feel bound especially to notice that disgraceful system of medical contract, which has of late arisen to a considerable extent, under the fostering care of the Poor-Law Commissioners, a system, whatever may have been the misery-inflicting tendency of the old method of farming parishes, on the unfortunate pauper, and its degrading effects upon the medical attendant, bids fair to outstrip its predecessor, not only in its utter inadequacy to supply efficient medical aid to the poor, but also in its injurious effects upon the long-established and universally-recognised rights of the medical profession. Your Committee allude to what have been called "Medical Clubs."

11. According to what is termed by their supporters the "excellent and simple code of laws" which has been framed for the management of these societies, a free member is to pay—if married, for himself and all children under sixteen years of age, 2d. per week, which is to be added to the subscriptions of the "honorary members:" and from this fund the surgeons are to be paid at the end of the year, not, be it observed, in equal proportions, but according to the number of tickets which each surgeon may hold; a method of dividing the spoil which your Committee believe to be about the most iniquitous that could possibly have been devised, and will remunerate that surgeon the best who disgraces his profession the most by intrigue and jobbing.

12. These institutions, notwithstanding that the greater part of the funds for their support are to come from the pockets of the "honorary members," are denominated "*self*-supporting." But your Committee believe that the term *self*-supporting is applied to these societies with the same degree of justice and accuracy of expression, as it is to the half-starved pauper who gets one shilling by his labour and two shillings from the rate.

13. Without devising any means to supply the labourer with a larger portion of the necessaries of life, the Poor-Law Commissioners have decreed, that unless he be in the actual receipt of parochial relief, he shall not be considered to be a pauper; and consequently, they have consistently enough refused him all gratuitous medical attendance—That a vast accumulation of misery and suffering, and a great increase of the lists of mortality, would be the probable results of such a proceeding, the Poor-Law Commissioners were not so void of foresight and penetration as not to observe—they

were therefore obliged to devise some plan to counteract the misery which they saw would result from their great anxiety, not, be it remembered, to instil into the mind of the labourer exalted feelings of independence, but at all hazard to reduce the rates, and to force "independence" upon him, or, as they themselves express it, to "throw him upon his own resources." To do these, an easy and effectual way presented itself by getting rid as much as possible of the expense of medical attendance upon the poor, and a more effectual way of doing which was not to be found, than that of seizing the hint thrown out by some doubtless well-intentioned medical men, to form as extensively as possible what the promoters of them have grossly nick-named self-supporting dispensaries. That it is right to instil into the mind of every man that desirable feeling of honest independence which teaches him to support himself and family by the proper exercise of those powers which nature has supplied him with, and by a provident frugality to obtain the means of "assuring" himself against casualties which are ever and anon the lot of all, is a doctrine which your Committee will not only admit to be a good one, but are desirous strenuously to inculcate; for it is a means directly of increasing happiness, and indirectly of preventing crime. But your Committee believe it to be impossible to obtain such a wished-for result, by compelling the labourer to set aside a portion of the pittance he receives for his labour—a pittance absolutely inadequate to provide him with a sufficiency of the necessaries of life, to meet contingencies which are but prospective, and which, however certain they may be of ultimately arriving, he cherishes a hope will long be delayed; and the hope is strengthened by the fact, that whatever economy he may use, the actual *wants* of himself, and perhaps a numerous family, can with the utmost difficulty scarcely be satisfied.

14. Charity prompts us to hope that practitioners who have promoted the formation of these societies, have been actuated, not by that narrow-minded policy which would prompt them to insinuate themselves, through the instrumentality which such institutions afford, into the remunerating connection of a neighbouring competitor, but by that exalted but misdirected feeling of true philanthropy, which urges its possessor to the performance of acts of pure benevolence and public good. Justice, however, hints that whatever may have been the "propelling power" in the minds of some practitioners, to induce them to yield to the authority of the Poor-Law Commissioners, to degrade the profession, and to dupe the poor, that others have been induced to do so from motives utterly unworthy to be entertained by members of a liberal and learned profession. One of the principal objects in establishing these societies, is said to be to "relieve the rate-payers from the charge of medical attendance upon the poor;" but as the rate-payers are to be called upon, though under the different name of honorary members, to support these societies, your Committee are at a loss to divine how they can afford to the rate-payers any substantial relief, beyond that of making a voluntary offering of what was before a compulsory payment—to be now decked out in the often pharisaical garb of benevolence and charity.

15. If these societies are, as they are said to be, the subjects of very general interest, and are calculated to be of such extensive benefit as their promoters assert, it follows as a natural corollary, that the formation of them should take place with the knowledge and concurrence of all the parties concerned; but general concurrence, it is obvious, can never be given for their formation, without convoking a meeting of the profession, and the public, to discuss the propriety or impropriety of forming them, the good or evil effects that would result therefrom; and if they are proved to be beneficial, to petition the legislature to enforce their adoption under just and proper regulations.

16. But what do we observe take place, when as the phrase goes "it is considered desirable" to establish one of these self-supporting societies? Why some medical practitioner, who has had the salary he received for his attendance upon the poor, wholly or in part rescinded by the consolidation of parishes under the Union system, sends a circular into each parish in which he thinks a club will be most likely to succeed, and such circular he probably directs, or accompanies it with a note directed to the clergyman of the parish, if that gentleman happens to be his friend, or his friend's friend, entreating him to use his influence to induce those persons in his parish, whom the Poor-Law Commissioners will not recognise as paupers, to pay to him, the member of a Royal College, the magnificent sum of 2*d.* per week, for which princely remuneration, the said member of a Royal College undertakes to supply each unrecognised pauper and his family with medical attendance, so long as the bodily ailments of such pauper and his family may last, and to provide them in all cases with the necessary medicine their maladies may require.

17. This is done too by men who are not only members of a Royal College, but members, perhaps, of some learned societies, and whose

> "Each particular hair would stand on end
> Like quills upon the fretful porcupine,"

were a denial given to the title they assume, of being liberal-minded members of a learned profession.

18. These societies lay claim to a degree of liberality in their management which it is

obvious at a moment's consideration they do not possess. Amongst other pieces of liberality, they affect to allow the members to choose their own surgeon; a point which all must agree is an exceedingly just one; but how it is managed will presently be seen, and to guard against an improper admission of members, by rendering it imperative for the free members, to apply to one of the medical officers previous to admission.

19. In order to show the affected liberality with which these clubs are managed in its proper light, your Committee will suppose a case, and one that is likely to be of every-day occurrence.

20. A free member, or one of his family, belonging to one of these societies, is taken ill, and, as a matter of course, he applies to an "honorary member" for a ticket to a surgeon, the poor man having, without doubt, previously determined in his own mind, what surgeon to apply to when he had obtained the ticket. The "honorary member" makes out the ticket, and doubtless asks the poor man, which surgeon he has fixed on, and if his choice has fallen upon a surgeon who has incurred the dislike of the honorary member, or the Poor Law Commissioners and the Board of Guardians, he probably gives the applicant an intelligible hint, that Mr. So-and-so, who has displayed much more subserviency than he, and who, perhaps, has broken an engagement with his brother practitioners, is his friend; that he knows him well; that he is a very clever man, and will be sure to afford him speedy relief; and gives the applicant to understand, if he do not tell him plainly, that he, the honorary member, will be offended, unless the ticket be carried to his friend, Mr. So-and-so. Nor is there a whit more of liberality or intelligence displayed, when it is said that improper admissions will be prevented, by rendering it imperative for free members to apply to a medical officer before obtaining admission; for where (as is sometimes unfortunately the case) the practitioners in a town are not quite amicably disposed towards each other, one of them might refuse an order for admission to an applicant, whose circumstances would not warrant his being considered an object of charity, but who, applying afterwards to another practitioner, not friendly disposed towards the one to whom application had been first made, and by whom it was refused, might, perhaps, in order to secure the applicant to himself, be induced to grant him admission, and would, consequently, make an unfavourable impression of his rival in the mind of the applicant. Yet these are the societies that are to add to the "social comfort of the poor," to "soothe the troubled spirit," and to confer a "benefit on the medical profession"!

21. But the absurd laws which have been framed for the management of these clubs are as nothing in proof their inutility, compared with the evil effects they will produce on the interests of the medical profession, and on those of the entire community; for, in the opinion of your committee, if these societies were generally established, the effects they would produce on the medical profession and the community are such as the promoters of them in many instances would be sorry to contemplate.

22. One of the immediate effects that must result from establishing these clubs will be that of creating in the minds of many of the community a distrust of the honour and integrity of the medical profession, for it will be said, with a considerable show of justice, that if medical men can obtain a comfortable living by contracting to cure or relieve all the bodily infirmities of a poor man for 2s. 6d. a year, and that they can do so few will be disposed to doubt, however astonished they may be to see men who are at least supposed to have been expensively educated meanly soliciting such kind of patronage, it will then be inferred, if the labourer's half-crown be a sufficient remuneration for the scientific services of an educated man for a year, that *double* that amount will be a *liberal* reward for the services bestowed on his compeers in society for a similar period.

23. The bodily ailments of the poor are necessarily, from their situation in life, often much more severe than similar affections in individuals better provided with the means of preventing disease, and consequently the poor, although they are often grossly neglected, require equally strict and efficient attention as the rich. But your committee submit that it is physically impossible for any man in a country district (and it is there that these societies are more generally formed), where patients are often at some distance from each other, to devote that attention to individual cases at a time when much sickness prevails, which the nature of those cases actually require, without neglecting others which he knows to be sources of profitable remuneration; and to do this is so well known to be at variance with all the causes of action in the minds of men, that your committee contend the just inference is that the poor will be neglected, that disease will increase, discontent will arise, and parents, dragging on a miserable existence, will propagate their offspring when tainted by disease, and thus entail upon succeeding generations a mass of malady which years of exertion will be unable to eradicate, and inflict on the country a vitiated population, the greatest bane any country can possess, to curse the hour which gave them existence, and to execrate the period when the Government of the country could be so utterly reckless of the nation's weal as to wink at the perpetration of such enormities.

24. So positively injurious are the effects

these societies are likely to produce on the profession and the public, offering as they do such utterly inadequate remuneration for professional services, that few men of respectability will engage themselves with them, nor can they be considered otherwise than as a part of a most disgraceful system of professional quackery, and as such, with very few exceptions, they will doubtless be spurned by all but the most abject and needy practitioners.

25. In a report on the medical management of the poor it may seem, perhaps, irrelevant to speak of the conduct of members of the profession, but the conduct of some of its members is so intimately mixed up with the subject, that it is all but impossible to leave it unnoticed, although no personal allusions will be made; but your committee regret that no Government in this country has ever yet seen the propriety of instituting a system of medical police, to obviate the injurious effects which result from professional misconduct.

26. In the absence of all legislative superintendence of that kind, to control unprofessional conduct and to mitigate or remove the evils which such conduct may produce, your committee can discover no remedy equal in efficiency to that of holding up its authors to public reprobation; but this obviously can only be effectually done by a well-conducted periodical, published at short intervals, in which the non-professional part of the public would take an interest. From such a work, based on the unerring principles of truth, and conducted with a zealous regard to render strict and impartial justice to you all, your committee believe much good would arise, and that it would oppose an effectual barrier to the further progress of professional misconduct. Such a work published in the provinces, and under the auspices of this society, would tend to raise the character of the profession, and so command that respect for its members which their usefulness in society entitles them to possess.

THE LANCET.

London, Saturday, June 18, 1836.

In stating the case of the medical contract in the last LANCET, relative to the Hambledon Union in Surrey, two errors occurred, one of which it is of importance should be mentioned. In fact, the case against both the medical and the non-medical contractors was *understated*. The offer of 110*l.* by the ADVENTURER of Salop was not *exclusive* of the usual charges for extras (line 5, column 2, page 375), but included the *whole* of those charges, with the exception of trusses. This matter will be placed beyond a doubt by the insertion of the advertisement, stating the terms of the contract, which was issued under the direction of the Board of Guardians, and published in the newspapers. First, however, we will print the circular which was previously addressed to the medical practitioners who had the care of the parochial poor at the time the Union was formed:—

(CIRCULAR)

"Godalming, April 12, 1834.

"Sir,—I am directed by the guardians of the Hambledon Union to apprize you, that they are desirous of placing the medical and surgical department of the Union in the hands of the several medical gentlemen who are now in attendance.

"The annual salary for the whole Union is not to exceed 250*l.*, and the contracts will include all medicines and attendance, together with leeches, cuppings, vaccinations of children, midwifery cases, where the assistance of the medical man may be required, and all instruments (except trusses) and other remedies for the treatment and cure of disease and accident for all paupers residing in the Union, whether belonging to the Union or not.

"I am further directed to request that you will inform the Board by a post-paid letter addressed to me, or by personal attendance at the Hambledon workhouse, on Monday the 25th inst. at 10 o'clock, whether you are willing to undertake the management of the district now under your care, or of a more limited or extended district, and at what proportion of the salary.

"On the other half-sheet I hand you a list of the parishes comprised in the Union, and the names of the medical men in attendance, and I would suggest that a personal meeting of such medical men would probably facilitate an amicable arrangement between all parties, and prevent any future difficulty. I am, Sir, your most obedient servant,

"CHARLES JOHN WOODS, Clerk.

"To ———, Esq.

"*Parishes.*	*Attended by.*
Hambledon House and Parish Hascomb Witley Thunley Elsted Piperharrow	Messrs. Haines and Balchin, and Mr. C. A. Parson, of Godalming.

Cranley Alfold Dunsfold Ewhurst	Mr. Jacob Ellery, of Cranley.
Bramley Womersh St. Martha Shalford	Mr. Ray, of Bramley, and Messrs. Woodyer, Stedman, and Eager, of Guildford.
Chiddingfold	Mr. Barrett, of Chiddingfold.
Haslemere	Mr. George Smith, of Haslemere."

The Board of Guardians having rejected the proposals of these respectable practitioners, the following advertisement was published in the newspapers:—

"HAMBLEDON UNION.—TO MEDICAL MEN.

"The Guardians of the above Union are desirous of contracting for the medical and surgical attendance of the several parishes comprised therein—viz. Alfold, Bramley, Cranley, Chiddingfold, Elstead, Dunsfold, Ewhurst, Hambledon, Hascomb, Haslemere, Piperharow, St. Martha, Shalford, Thursley, Witley, and Womersh. The contract will *include* all medicines and attendance, together with leeches, cuppings, vaccination of children, midwifery cases, where the assistance of the medical men may be required, and all instruments (except trusses) and other remedies for the treatment and cure of disease and accident to all paupers residing in the above-mentioned parishes, whether belonging to the Union or not. Sealed tenders, indorsed "Hambledon Union Medical Tender," may be delivered to me at my office in Godalming, at any time before nine o'clock, on Monday, the ninth day of May next.

"CHAS. JOHN WOODS,
Clerk to the Board.

"Godalming, April 25, 1834."

For attending the poor of sixteen parishes, including a population of 12,000 persons, extending over a surface of ten miles in breadth and twenty miles in length, the performance of the duties, including all the usual "extras," comprehending the treatment of all surgical cases, vaccination, and midwifery,—an offer was made to undertake the whole of these duties for the sum of one hundred and ten pounds per annum, and the person who could make such an offer was received as *a properly-qualified individual* by the Guardians of the Hambledon Union! If he had offered to take the Union *gratuitously* he would, we presume, have been accepted, and the Guardians in that case might have presented him with a *douceur* of fifty or sixty pounds. But we contend that the fact of his having sent in an offer to comply with the stipulations set forth in the advertisement, for the sum of one hundred and ten pounds, is sufficient proof that the party who made it is destitute of those requisites of feeling and judgment, of those moral attributes and mental requisites, which are essential to the efficient medical treatment and protection of the suffering poor. Medicine is not a *luxury*. It is one of the most important necessaries of life. It is rendered such by experience, as well as by discoveries in the sciences of anatomy and physiology. The man, therefore, who undertakes to supply his fellow creatures with one of the necessaries of life, at a charge which will *preclude* him from fulfilling the terms of his engagement—at a charge which, in many instances, will cause the means of securing life to be *withheld*,—at a charge which must *add* to the amount of human suffering,—at a charge which has a direct tendency to *protract* the existence of disease, and promote mortality,—such a man is guilty of a crime against humanity which the law of libel prevents us from properly designating? In what station of life are the Guardians who have ratified such a contract? Who are they? What are they? If they be *fathers*, would they consign their own children to the care of *any* individual who might offer to furnish them with instruction, medical treatment, food, and lodging, at the *lowest* rate of payment? If they be farmers, would they consign their cattle to the tender mercies of a contractor who might offer to maintain those animals for the payment of a sum amounting to not one tenth part of the actual value of the hay or corn which must be absolutely essential to their health and well-doing? No; all offers of the kind would not only be rejected, but *no others* would be received from the same parties. The *insufficiency of the demand for adequate remuneration*,

would be received as positive evidence of the dishonesty or the cruelty of the proposer. Self-interest would indicate that living creatures could not be safe in such hands. Unfortunately, with respect to *the poor*, self-interest seems to dictate a contrary line of policy. There is no reimbursement of the cost of maintenance. The incurable, the aged, the infirm, who have no source of relief, of sustenance, if it be not found in the parochial funds, excite no more sympathy or compassion than does a decrepid worn-out beast of burden, whose existence is terminated by the hand of the executioner at the hour when it ceases to be profitable to its owner. The hammer, it is true, is not employed to beat into pieces the skulls of the aged and sick paupers, but they are made to fare almost as badly when the Guardians let loose upon them such a person as Mr. FREDERICK YATES, of Madeley, in Shropshire, who does not stipulate for killing them, but professes to treat with the requisite skill and attention, to perform all surgical operations, to aid in cases of midwifery, the necessitous poor in a population of twelve thousand persons, resident in sixteen parishes, and spread over a surface of sixty miles in circumference, for the pittance of one hundred and ten pounds. FREDERICK YATES, of Madeley, Salop, is the medical contractor in this instance.

Who is FREDERICK YATES? What is the history of that person? Where was he educated? What is his character for humanity, integrity, ability, industry? These questions are proposed in order that they may be answered by some of those persons who are in possession of the facts which a reply to them is calculated to disclose. The contractors shall not be spared, we warrant them. They shall be castigated to agony. No means of escape shall be allowed to any of the ADVENTURERS who violate all the claims of humanity, and disgrace the profession, by entering into engagements of such a cruel and unprincipled description.

The terms of another contract, and the conditions of another medical club, must now be added to those of Stroud in Gloucestershire, and Hambledon in Surrey. The new scene is to be found at Devizes in Wiltshire. An inhabitant of Devizes, one of the guardians of the Union, has forwarded to us the following letter, together with the prospectus of the club:—

DEVIZES UNION.

To the Editor of THE LANCET.

SIR: My time has been so much occupied with public business, principally relating to the office of Guardian under the new Poor-Law Act, that all other pursuits are obliged to give way to this absorbing business. If I could have foreseen the claims the office would have made on my time and attention, I should have declined the *honour* of the appointment. But my feelings will now allow me to retreat, as there are but few of us to battle for something like liberal treatment of the poor. As for your profession, its honour is prostrated by the practitioners themselves who are resident in the town. We divided out five districts into seven medical divisions, independently of the workhouse, designed to be used by the whole Union. We advocated this plan in the hope that the poor would be better attended to. At present we have nearly a hundred men, women, and children, in one temporary workhouse, and what do you think the medical contract for the workhouse is taken for, and with stipulations to find medicine into the bargain? Oh, tell it not in England! The house is taken by Mr. William Waylen, calling himself a surgeon, at one shilling per head for each pauper per annum, the amount not to exceed *ten pounds for a whole year!* And this includes all surgical cases and the treatment of all casualties, midwifery alone excepted!!! Waylen has also contracted for the district of Rowde, Bromham, and Chittoe, at three shillings per case, and not to exceed forty pounds for the year. Tenders were made for the other districts, at five shillings and sixpence per case, by Messrs. Fowler, Barker, and Mayo. The remaining districts were disposed of on similar terms to the neighbouring resident practitioners in the adjoining villages, *to the disgrace of the profession.*

In addition to these debasing contracts, we have now attempts making to establish here a medical club. I enclose a prospectus of the terms, issued in a printed form by little Mr. Mayo. This sprig of physic has been here about three years, and it appears he is not very nice as to the means he adopts to further his own interests. But

with the thinking portion of the community. It will neither advance his fame nor increase his practice. Believe me, in all sincerity, yours, &c.

AN INDIGNANT TOWNSMAN.

Devizes, June 9th, 1836.

"SELF-SUPPORTING MEDICAL RELIEF CLUB.

"In consequence of certain recent arrangements in the medical attendance on parishes, arising out of the operation of the new Poor-Law, it has been suggested that the poor would become more independent, and ensure greater attention in cases of sickness, if by clubbing a small sum yearly they could obtain the assistance of a medical man, without any reference to a parish officer.

"With a view to this end, Mr. GEORGE MAYO, Surgeon, Devizes, offers his professional services, to those persons whose relief is contemplated, on the foregoing principle; subject to the following rules:—

"1. The benefit to include Devizes, the parishes of Potterne, Worton, Poulshot, and Rowde; and all persons wishing to become subscribers must apply to have their names entered on or before the 2nd of May.

"2. Subscriptions according to the following scale to be paid at entering:—All persons above the age of eighteen, one shilling and sixpence a year; husband and wife, two shillings and sixpence: and children sixpence each, till the subscription, including the father and mother, amounts to five shillings; which will be the highest annual sum required for any family, however large.

"3. All subscribers will be expected to attend at the surgery, unless the sickness is so severe as to prevent leaving home.

"4. The subscriptions include medicines, and attendance medical and surgical, in all cases of illness (midwifery only excepted), and should the disease be lingering, or the patient in great danger, the additional aid of a physician will be provided.

"5. Every annual subscriber of one sovereign to be considered as an honorary member, and to have the privilege of naming three patients within the year.

"H. Ball, Printer, Devizes."

Scarcely had we determined on printing the foregoing documents, when the following communication was put into our hands. The contents of this document are not less important than the intelligence which has been conveyed to us from the other districts in which the agents of the Poor-Law Commissioners and the Guardians have insulted the members of the medical profession, and stipulated for the destruction of the sick poor:—

BASFORD UNION, NOTTINGHAMSHIRE.

To the Editor of THE LANCET.

SIR: I beg to call your attention to, and thus, if possible, obtain a remedy for, before it is too late, the disgraceful medical contracts which are about to be executed in the Basford Poor-Law Union in the county of Nottingham. This Union is divided into four districts. The district No. 1, to which I would refer you, contains 21,429 inhabitants, and includes a surface of from twelve to fourteen miles in length, and of about the same extent in breadth; yet I am assured that one medical man, in a tender, offered to perform all the medical and surgical duties of the Union, and supply all necessary medicines to the whole of this district, for the sum of 120*l.* per annum, and that one or two professional neighbours of his undertook to perform the same duties for 150*l.* per year. Now any person in his senses must be thoroughly satisfied that no one man, supposing him to devote his whole attention to the Union, and allowing him to be ever so active, even with three or four horses constantly at work, could do anything like justice (justice indeed!) to the sick poor of such a district. Yet we find the Guardians, under the dictatorship of Mr. Sub-commissioner Gulson, rejecting these tenders as TOO HIGH; at least, so I am told, and the statement is borne out by fresh advertisements, announcing a subdivision of the districts, in order to open a wider field of competition, and invite fresh tenders, to be sent in by the 28th inst. I hope and trust, for the sake of common humanity on the one side, and professional decency on the other, that both these reports are unfounded. Indeed, notwithstanding the disgraceful acts committed in the Stroud Union, I can scarcely believe that any educated medical man can degrade himself and the profession so much, as to *seriously* entertain such a proposition; but should it unfortunately be true that men, claiming the title of *gentlemen*, are so poverty-stricken, so lost to a sense of honour, as to bring disgrace, odium, and eventual ruin on the profession, by this course of personal abasement, the upright members of that profession should enter at once upon a plan that will establish an unequivocal distinction between themselves and their degenerate brethren.

It will be worth while to remind your readers of the sums offered by the Commissioners themselves for medical attendance in different Unions, as stated in some recent Numbers of THE LANCET. The Wheatenhurst Union, containing fourteen parishes and 8000 inhabitants, was tendered for at

100*l.* by Mr. Weale; the Docking Union in Norfolk, containing a population of 15,368, was put up and taken at 200*l.*; the North Aylesford, comprising fifteen parishes, and, I presume, about 14,000 people, at 180*l.*; and, lastly, the Hambledon Union, with sixteen parishes, and 12,000 inhabitants, has bargained with the GENTLEMAN from Shropshire, who offered 110*l.*

A consideration of these different sums, compared with the *rejection* of 120*l.* per year for a population of 21,429, will prove that the Commissioners act upon no settled or organized plan, depending upon the meanness of the party in treaty. The extent of country, of population, or of services required, are guided entirely by a shameful parsimony, and the proposals made to the medical men are more or less insulting in proportion to the obsequiousness or the degradation of the parties with whom the functionaries have to deal. Let me ask those medical gentlemen who accompanied their tenders to the Basford Guardians on the 31st ult., what they have gained by their submission; and I may ask those who were guilty of sending in the 120*l.* or 150*l.* tenders, were they not, after dancing attendance in the lobbies of the workhouse for three or four hours, at last told *to go home about their business*, that none of their tenders would be accepted, that they were all *too high*, and that the Guardians had altered their minds. Is this not enough, Mr. Editor, to make the blood boil within one's veins? Yet, shameful to say, there are men who will submit to receive these offers AS A BOON, and *fawn* upon the authors of their dishonour. Let me entreat you, Mr. Editor, to continue your earnest and forcible deprecation of the ruinous system thus attempted to be thrust upon us. Do not be deterred by the apparent apathy or cowardice,—I scarcely know what to term it,—of the sufferers, but persevere until you have established the profession on a firm, lasting, and respectable basis; and depend upon it, that your efforts will be crowned with the best wishes and the sincere thanks of all honourable men. I shall keep an eye over the tenders sent in on the 28th instant, and will furnish you with the full particulars of them, if necessary. In the mean time you can make what use you think proper of this, and believe me to remain your grateful servant,

JUDEX.

Sutton, Nottinghamshire,
June 13, 1836.

Where and when will these horrible atrocities terminate? At present, the further we proceed in the investigation, at every step we take, the blacker and more infamous is the scene which we are called upon to view. Atrocious as is the insult which is offered to the profession by the tools and hirelings of the Board of Commissioners,—scandalous as is the disgrace which is inflicted by them upon the medical body,—servile, mean, and cowardly, as is the conduct of those members of the profession who have so basely truckled to the mandates of the VAMPIRE COMMISSIONERS and GUARDIANS,—infinitely are all such matters and considerations as these outweighed by the frightful, the dreadful,—we hesitate not to say the MURDEROUS consequences,—the fatal and irremediable results,—to the welfare and lives of the parochial poor. We can appeal with confidence to our experienced medical brethren on this subject. Beyond all other men, the medical practitioner is acquainted with the comfortless, the destitute condition of the sick pauper's home,—his *home*, did we say?—of his *hut*, of his *hovel*, of his *cave!* In the best seasons, when health and daily toil yield their weightiest store, has the agricultural labourer, even *then*, in his palmiest moments, a single luxury, a single solace, beyond the satisfaction which is derivable from an untainted conscience, and a still-clinging hope of better times? What are his wages? In West Somerset, and in Devonshire, where the vile medical contracts in the Unions have already been extensively perpetrated what, we ask, has been the amount of the agricultural labourer's return in money for seventy-two hours of slave-like toil performed within the week? Six shillings, in many cases. In no case, in that part of the country, so far as we can learn, has the sum exceeded seven shillings. After the *rent* is paid, after the *fuel* is purchased, after the *clothes* are bought, how much is left to purchase *food* for a wife and infant children? A new system of arithmetic is required, to enable the calculation to be made. We must dip far below the *unit*, and add and multiply by *noughts*. In the hut of such a labourer, where no sign of misconduct prevails,—where honesty and industry sustain

the inmates against despondence and the commission of crime on the one hand, and the cravings of actual want on the other, what happens, when the arm of the husband and father becomes palsied by sickness? *Then* commence all the horrors of poverty and disease. Stretched upon a bed—no, it is no *bed*. Stretched upon a bag of straw, he hears the cry of his half-starved children for bread receive no other response than the sobs of his distracted wife; or, probably, all consciousness being lost in the clouds of an established frenzy, his distorted and half-burnt lips receive with signs of momentary ease, the streams of sorrow which fall from the cheeks of a broken-hearted wife and mother. The father lingers on. His affectionate and devoted partner sinks under the pressure of her accumulated misfortunes and anxieties, and the poor little children, deprived at once of the smiles and succour of their parents, are soon destined to be the inmates of a workhouse, there to be subjected to all the villanous and unnatural restraints which are imposed by men who forget what were their own feelings when *they* were children, and who consider that the wretchedness of a whole family is an unimportant item in the account, if, in its production, the sum of *five shillings* has been *saved to the parochial funds!* In such a hut, upon such a scene of wretchedness, before a father, a mother, and their children, situated and circumstanced as we have here described, a brute, in the shape of man, obtrudes himself, displaying in the human lines of his savage countenance, the following inscription:—

"ALL WHO ARE SICK
IN THIS PLACE, ARE CONSIGNED BY
LAW TO MY KEEPING, AND MUST SUBMIT
TO MY POWER AND AUTHORITY.
ALTHOUGH YOU WERE NO PARTY TO THE
CONTRACT, I HAVE ENGAGED TO
FURNISH YOU IN THIS ILLNESS,
AS WELL AS IN ALL
OTHERS WHICH MAY HAPPEN THROUGHOUT
THE YEAR, WITH ALL NECESSARY
MEDICINES AND MEDICAL ATTENDANCE."

A description of the afflictions of the wife is met by rebukes,—the offspring are scolded into silence, and the grin of the maniacal patient is acknowledged by the self-sufficient smile of the CONTRACTOR, who, on quitting the, to all but him, dreadful scene of misery, exults in the conviction that "the troublesome job *there* is nearly at an end,"—that the business is about to be concluded by the *undertaker*. True, the brain was inflamed, but the CONTRACTOR had not *time* to bleed. True, the brain was inflamed, but the CONTRACTOR had not *time* to perform the operation of cupping. True, the brain was in a state of violent inflammation, but arteriotomy was not performed. True, the brain was deluged with a tide of boiling blood, but no leech sluices were opened to assuage the impetuosity or mitigate the danger of the torrent.

"Ah!" ejaculates the barbarian CONTRACTOR, in conclusion, "the grave has no voice. "I have neither conscience nor religion, "and, better than all, should there be an "inquest on the body, that respectable and "venerable solicitor, Mr. PARCHMENT, the "coroner, will laud me in open court for "giving such excellent and satisfactory evi-"dence, and puff me before the gentry of "the surrounding country, for the humanity and skill which I exhibited in the "treatment of the unfortunate deceased, "whereupon I may safely concur with the "poet in saying, that

"'Conscience is our coin, we live by parting with it,
"'And he thrives best who has the most to spare.'"

There is but one excuse which can be offered for the conduct of the Poor-Law Commissioners. They are no judges of what *ought* to be done in medical government. Let us hope, therefore, that in making their arrangements, they have erred from ignorance of the duties which medical practitioners are required to execute, and of the manner in which unfeeling contractors may neglect or maltreat their unfortunate pa-

tients, without incurring the slightest risk of detection.

Upon whom, then, is thrown the duty of instructing the nation on this subject? It rests with *medical practitioners themselves*, who must have discovered already, that *complaints* and *remedies* are very different things. The fable tells us, that when the wagoner perceived that his horses were incapable of mastering their load, he stood by and howled to a superior power for relief. After receiving a rebuke in reply, the idler was commanded to put his own shoulder to the wheel, and heave with all his might, with a remark that unless he did so, he could not expect to receive assistance from any other quarter. Upon this very instructive and useful fable the French proverb has been founded, which declares that "Heaven will help those who help themselves." Although the medical practitioners cannot justly be charged with apathy on this occasion, yet we do not witness among them that unity of purpose and co-operation, which must precede the introduction and application of a remedy for the removal of their grievances; but, as we have already repeatedly stated, the evils which fall upon medical practitioners, from the contract system, in the Unions, are infinitely less calamitous than those which befal the poor. It is not so much a medical as it is a public question. It is not so much a question of science as it is one of *humanity*, and if it be left in its present state, a stain of no ordinary character will be inflicted upon the reputation of the British Government.

What, then, is to be done? Something more must be effected than a mere record of our grievances. We must, in fact, stick our shoulders to the wheel in right earnest, and heave on until the nuisance is left behind. The fatal obstinacy with which the Commissioners, the Guardians, and their agents, are still pursuing their cruel policy, indicates, but too plainly, that the remedial efforts of the profession must be directed to another quarter. In a word, TO THE LEGISLATURE. This was our recommendation when the complaints were *first heard*,—even before the Kentish deputation waited on the Commissioners at Somerset House. We would, therefore, most earnestly entreat our professional brethren to pour petitions into the House of Commons, praying for *an inquiry into the modes and effects of the present system of providing medicines and medical attendance for the sick parochial poor in this kingdom*. Some such petition as the following would be fully adequate to the purpose:

To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled,

The petition of the undersigned surgeons, ratepayers, or inhabitants (as the case may be), of ———, showeth,

That an Union under the Poor-Law Amendment Act has been formed in this district, including ——— parishes, extending to ——— miles in length and ——— in breadth.

That it contains a population of ——— thousand persons.

That the cottages of the poor are scattered throughout the whole district.

That the number of persons who receive parochial relief in the course of the year, in the whole district (or in a part of the district, as the case may be), cannot be less than ——— persons.

That your petitioners have heard with extreme alarm and regret, that Mr. ———, of ———, surgeon, has entered into a contract with the Board of Guardians, in which he has undertaken to provide the poor with [here set forth those conditions of the bond] for the sum of [here state the salary for the whole Union, or the sum per head, or case, as in the Devizes workhouse (see letter, page 401), as the fact may be].

That your petitioners being fully impressed with a sense of the dreadful consequences which must ensue to the afflicted poor from the continuance of such an arrangement, or from the attempts which may be made to carry it into full effect, most earnestly beseech your honourable House to institute an immediate inquiry into the truth of the premises herein set forth, and to adopt such remedies for the removal of the grievance as in your wisdom may seem meet.

And your petitioners will ever pray, &c.

If petitions of this description were forwarded to members of the House of Commons,—instantly,—AT ONCE,—without the delay of A DAY,—there would yet be time to obtain the appointment of A SELECT COM-

MITTEE OF INQUIRY, and to prosecute the subject to a conclusion in the present session of parliament, as the two Houses—should they not be knocked to pieces by their stupid "collisions"—may yet remain open during another six weeks or two months; but the whole of the inquiry into the mode and effects of the contracts for the treatment of the sick poor in the Unions, could not, with proper management, occupy more than eight or ten days.

We have *time*, then, if we have energy and industry. We have *time*, if we do not prefer mere *whining* to active, useful, well-directed *exertion*. Petition the House of Commons for inquiry, FORTHWITH. Surgeons may petition. Rate-payers may petition. *Any* benevolent individual may petition, and all persons *will* petition who do not delight in the torture and destruction of the poor. Every surgeon may obtain the signature of some of his neighbours. If a petition have but *one* signature, still, it is a *petition*, and it must contribute towards promoting the desired results. The petition may be written on a sheet of paper, and may be sent to any member of the House of Commons, by post (free from charge to either sender or receiver), addressed thus:

"Petition to the House of Commons.

"To Mr.——— (or Sir, Lord, or Right Hon., as the case may be), M. P., London."

The address must be written on a strong paper cover, open at both ends, like a newspaper. It must contain no letter or note,—consist of nothing, in fact, but the petition and the envelope.

Come, then; let us not stand tamely by and witness the wanton destruction of the most innocent and the most distressed portion of our fellow creatures. If we cannot take the trouble to PETITION for inquiry, it is high time that we should withhold a statement of our complaints.

We would close this article by adding to it a letter from Stroud, in which some further frightful but useful expositions are given, and by which some equally useful information is sought to be obtained, but we have not room for it this week.

WE insert with feelings of pride and exultation the report of the committee appointed by the Eastern Provincial Medical Association on the medical management of the sick poor. We have numbered the paragraphs with a view to a more easy reference to the various contents of the document, by ourselves or our readers. This week we have no room for further remark on the subject. The report will be found at page 393.

WE have inserted in another part (page 390) of our journal this week, a copy of the MEDICAL WITNESSES BILL. It is set down for a "second reading" on Wednesday, the 22nd instant. Its introduction at an earlier period has been impossible. In fact the whole *business* of Parliament has been in a state of stagnation for months. Scarcely one public Bill has passed the House in the present session. Even the ministerial measures are repeatedly on the books for weeks together, without being advanced a single stage.

FUNCTIONS OF THE VOICE.

Stammering, and other Impediments of Speech, and the means of effecting a complete and permanent Removal of all Vocal Obstructions. By ALEXANDER BELL, Professor of Elocution, &c. London, Sherwood, 1836, pp. 94.

IT seems strange that the physiology of the voice, though the organ of speech is of such vital importance to society, should have so little attracted the attention of natural philosophers until within the last ten years. Horne Tooke, in his "Diversions of Purley," observes, that "the organical part of language is in many respects grossly misunderstood, though the consequent errors might easily be corrected by the help of some of the first principles of natural philosophy and anatomy." Volumes have, indeed, been

written by grammarians on the formation of oral language, but a glance at their contents will convince us of the total ignorance of the writers in regard both to the properties of sound, and the structure of the parts employed in its utterance. The painful effects of obstructed enunciation must strike the most superficial observer, and it may justly excite wonder, that the treatment of this class of maladies, which is based upon a few simple principles, should hitherto have been abandoned to the management of mercenary empirics.

The affections of the human voice, without doubt, possess strong claims on the attention, not of the physiologist only, but of the pathologist, and upon them every medical man ought to be qualified to express a rational opinion. The works of the pure "orthoepists" are scarcely worthy of perusal, for, excepting those of Walker, they contain but few useful hints. The only sources of information are the recent productions of a few anatomists and experimental philosophers.

Previous to examining Mr. Bell's excellent little work, we shall sum up the facts which are now ascertained respecting the functions of the vocal organs.

A division of these functions into the two classes of *voice* and *speech* is now generally admitted. The voice consists of the natural sounds produced by the glottis, and improved by other parts, in every variety of pitch, quality, and intensity, from the most dulcet melody to the most execrable grating. Speech is the union, by articulation, of certain of the vocal sounds. Voice is the gift of nature, speech a combination of art. To the voice appertains the quality of expression. By its variations of tone, the passions are represented, and instinctively and instantaneously construed by the ear of the listener. It requires no process of ratiocination to distinguish the cry of distress from the shout of triumph, or the frank ejaculation of good will from the mutter of discontent. The tenour of such sounds has no ambiguity, even to the ear of an infant. True vocal expression is beyond the perfect imitation of the hypocrite; his whining will not pass for sentiment, nor his crocodile tears for genuine drops of grief. This truth explains the difference between the success of the mere Thespian artist, and the artist of genius. The former endeavours to simulate the various modulations of voice which have before conveyed to his mind the impression of certain feelings. He necessarily fails, for the mode of expression which is natural to another would be simple mimicry in him. In fact, perfect imitation is impossible, because the powers employed are not entirely under the influence of the will. The actor of genius, on the contrary, has the ability actually to assume the character which he is to represent, and is enabled, by a kind of imaginative metempsychosis, to imbue himself with all the feelings which the supposed surrounding circumstances are calculated to excite.

To the province of speech are properly referred the acts of pronunciation, accentuation, and emphasis; and what are called defects of utterance are, in the majority of instances, ascribable to unskilfulness in the art of speech. The vocal mechanism consists of *lungs*, which transmit, by means of the connecting windpipe, a current of air, through the apparatus termed the larynx, which is capable of producing various musical notes, which are heard after passing through certain cavities, consisting of the pharynx, the nose, and the mouth. The thorax and its air bags can only be considered in the light of a living bellows, placed under the influence of a nervous system, formed to obey the dictates of the mind.

Sir Charles Bell and Magendie agree in considering the windpipe to be what its name implies, a mere *porte vente* for the conveyance of the air from the lungs to the larynx; but it is to be remembered, that it is a sensible tube, having the properties of elongation and curtailment, contraction and dilatation. By means of the transverse muscular fibres enclosed in the membranous part of this canal, such a degree of straitness may be produced as to give to the volume of air sufficient force to carry with it any contained extraneous substance, or superfluous mucus, as is seen in coughing and expectoration. This contractile property of the trachea is also called into action, in combination with certain muscles of the glottis, to produce the *vox collaris*, or falsetto voice.

The larynx is the primary seat of voice; but for the vocalization of the breath in the glottis, it is necessary that a column of air should be impelled against the chordæ vocales with a certain degree of force, and that the vocal chords should possess a given

degree of tension, and be placed in a certain relation to each other.

"In consequence of wounds in the throat," says Sir Charles Bell, "I have had repeated occasions to witness the motions of the glottis in man, both during simple breathing, and in speaking. On every inspiration the glottis dilated. Upon asking a patient thus situated to speak, and encouraging him, when no sound proceeded, by saying, that I could understand him by the motion of his lips, I have seen that, in the attempt at utterance, the glottis was moved as well as the lips; and I observed, that universally there is a motion of the glottis in correspondence with that of the other organs of speech.

"Non seulement," says Magendie, "le larynx produit la voix, mais il est encore l'agent de ses principales modifications." "An opening," proceeds he, "in the trachea below the larynx, deprives man, as well as animals, of the voice. This will be made evident if the hole be mechanically closed. I have known a man for many years who has a fistulous opening of the larynx; he cannot speak, unless the opening be closed by a cravat.

"The same result takes place when the larynx is opened below the inferior ligaments of the glottis, or true chordæ vocales. On the contrary, a wound existing above the glottis, even if it divide the epiglottis and its muscles, and materially injure the superior ligaments, and even the upper part of the arytenoid cartilages, will not suspend the voice.

If the French physiologist here mean that such an accident will not totally destroy the voice, he is perfectly correct; but a recent case related by Professor Mayo proves that vocalization can only be produced by great labour and pain to the patient, and that the tones are very imperfect.

To medical readers an anatomical description of the glottis is quite supererogatory; we, therefore, proceed with Magendie:—

"If we take a trachea and a larynx of an animal or of a man, and with a bellows impel the air into the trachea towards the larynx, no sound is produced, but merely a slight noise (*bruit*), the result of the friction of the air against the walls of the larynx. If, continuing to blow, the arytenoid cartilages are made to approach each other, so that their inner surfaces touch, a sound will be produced analogous to the voice of the animal to which the larynx may belong. It will be more or less *grave*, according as the cartilages are pressed against each other with more or less force, and its intensity or loudness will be in proportion to the force of the current of air. It is also shown by this experiment that it is the inferior ligaments of the glottis which by their vibrations produce the sound. The glottis being opened in a living animal, it is easy to perceive that the vocal sounds are produced by the vibrations of the inferior ligaments."

The result of M. Magendie's speculations amounts to this, that the air impelled from the lungs, enters at first a canal of large dimensions; this canal is soon contracted, and as the air is obliged to pass through a narrow chink, of which the two sides are vibrating plates, which (like the tongues of reeds) permit and intercept by turns the passage of the air, and by these alternations produce sonorous undulations in the current of air. The tension in the chordæ vocales is produced by the action of the various laryngeal muscles. Magendie has shown this, by dividing one or both of the recurrent laryngeal nerves which are known to supply these muscles, cacophonous or aphonous effects being the alternate results.

The Rev. Robert Willis, of Caius College, Cambridge, has written most satisfactorily upon this subject. His success is probably owing to his joining to an accurate knowledge of the structure of the parts, an intimate acquaintance with the principles of acoustics. He controverts the opinion of Magendie, that the notes of the human voice are grave or acute, according to the length of the chordæ vocales vibrated. Magendie exposed the glottis of a dog who was made to howl by the pain of the operation:—

"I saw," says he, "that when the sounds were grave, the ligaments of the glottis vibrated in their whole length. In the most acute notes the ligaments vibrated not at all in their anterior part, but in their posterior part; and the opening of the glottis was much more straitened in the one case than in the other. Finally, when the *most* acute sounds were produced, the vibrations were only visible at the arytenoid extremities of the vocal chords, and the air did not escape except through that portion of the glottis. It appears that a termination to the acute sounds is produced by the complete closure of the glottis, and the perfect introclusion of the breath."

Mr. Willis objects to the applicability of this experiment, on account of the incomplete analogy between the human and canine voices, the former being beyond comparison superior to the latter. Mr. Willis carried on a synthetical as well as an analytical examination. He not only, with great

care and industry, gathered up all the facts which observation and experiment could afford, but he formed an artificial larynx. Having described the natural arrangement of the organs, he says,—

"If this natural arrangement be imitated, substituting for the larynx any elastic *lamina* capable of producing musical notes when vibrated by a stream of air, it is found that by changing the form of the cavity above it, the various qualities which distinguish the notes of the human voice may be so easily imparted to the sound which the imitative larynx is producing, as to prove there is no necessity for seeking in the larynx for a power of altering the quality of the notes."

The larynx, then, may be considered as an instrument for producing certain musical notes, which are afterwards to be converted into vowels, liquids, &c., by the proper changes of form in the superior cavity. In act, according to Mr. Willis, the duty of the larynx is confined to the production of the *pitch* of the note like the organ-reed. The case of incised larynx quoted by Mr. Mayo, in which the razor divided the os hyoides from the thyroid cartilage, would appear to support the idea that its powers were still further limited, and that the notes of the gamut, as well as the vowel sounds, were produced by the action of the pharyngeal cavity.

"When the patient," quoth Mr. Mayo, "utters a continued sound, the condition of the parts is the same as when the glottis is forcibly closed. *The patient has but one note in the voice.* When he passes alternately from one of these actions to the other, no visible change takes place in the disposition of the parts. The arytenoid cartilages do not *appear* more or less closely applied to each other in either case. But a tremulous vibration is discernible in the latter."

From the principles of acoustics, however, we are warranted in concluding that the pitch actually depends upon the tension of the *chordæ vocales*, for it must be recollected that Mr. Mayo's patient was not in a *natural state*.

The conclusions of Mr. Willis, though not actually demonstrative, afford the highest degree of probability as to the nature of the vocal functions, and they constitute the following summary. The deductions are not formed until after a minute examination of the muscles, ligaments, cartilages, and arthrodial arrangements of the larynx. The current of air from the lungs excites the inferior laryngeal ligaments to vibration, and thus produces the sounds of the voice. The opposite surfaces of the ligaments must be placed in a given position as regards each other; that is, they must be inclined from each other to let the breath pass, and to produce vocalization they must be parallel. This is the reason why the ligaments are silent when the ordinary breath passes through the chink. It is not because their tension is insufficient, because their tension is generally corresponding to that of the pitch of the speaking voice. To obtain various notes from the glottis, it is only necessary to vary its longitudinal tension after its ligaments have been placed in the proper, that is the parallel position.

The production of a musical note takes place at the pleasure of the individual. The breath has been previously traversing the passage in silence, and at our will some change is immediately made in the larynx, which produces the note, and this certainly depends upon *something more* than the mere closing of the passage, because we can make the aperture of the glottis pass through all degrees of contraction up to the absolute occlusion, during the expiration of the breath, without producing any sound, except the usual rushing noise of a forcible current of air through a straitened aperture.

This change (of which we are so perfectly conscious) in the larynx is produced by an alteration in the inclination of the planes of the vocal ligaments towards one another. From being inclined laterally from each other (the planes having a superior aspect), at an angle, perhaps of thirty degrees, by a slight effort of volition they are made parallel, and immediately the breath is vocalized.

Mr. Willis explains the production of these effects in the following manner. The cricoid cartilage being the fixed point, the thyroid cartilage is capable of a slight rotatory motion in regard to it. The effect of this motion, which is produced by the crico-thyroidei muscles, is to stretch the vocal ligaments, which it will be recollected extend from the anterior and interior surface of the thyroid to the base of the arytenoid cartilages, which base is firmly attached to the basis of the cricoid by strong ligamentous bands. The proper antagonists of these muscles are the thyro-arytenoidei, which relax the vocal chords, and, with the

assistance of the arytenoidei transverse and oblique, place them in parallel planes, that is, in the vocalizing position. The crico-arytenoidei postici open the glottis. The crico-arytenoidei laterales press together the front portion of the arytenoids, and, with the aid of the arytenoidei obliqui et transversi, close the glottis. The following tabular arrangement may, perhaps, make the subject clearer. *En passant* we may observe that the edge of the glottis is fibrous and elastic, that of the pseudo-glottis a reduplication of the mucous membrane.

Antagonists.	Crico-thyroidei stretch the vocal ligaments.	
	Thyro-arytenoidei relax the same, and place them in the vocalizing position.	Govern the pitch of the notes.
Antagonists.	Crico-arytenoidei postici open the glottis.	
	Crico-arytenoidei laterales press together the front portion of the arytenoids.	Together close the glottis.
	Arytenoidei transversi et obliqui press together the lower part of the arytenoid cartilage.	Govern the aperture of the glottis.

The relative motion of the thyroid and cricoid cartilages is made evident by placing the finger during speech on the triangular space below the pomum Adami, formed by the respective edges of those cartilages, when the varying size of the triangle will be immediately detected, and, with a little attention, the nature of the movement producing this variation ascertained.

Mr. Mayo having ascertained that the vocal chords have their planes in close apposition as well as parallel, forms a theory upon the subject which we have no space to consider; we shall, therefore, proceed to take a transient view of the "variable cavity," consisting of the pharynx, the nose, and the mouth.

An essential difference exists between the vocal mechanism, and our ordinary musical wind instruments, which are generally made of some vibrating mouthpiece to generate the note, and an attached cavity or pipe to govern and augment its tone, each instrument having its *peculiar* quality; whereas, the attached cavity in the vocal machine is capable not only of governing and improving the musical quality of the note, but also of imparting to it all manner of various qualities, the numerous vowels and liquids of speech, and also the perfect mimicking of the peculiar sounds of nearly all animals and musical instruments.

We need not dwell here on the functions of the sacculi laryngis, though the size of these cavities in some of the *simiæ* produces an evident effect upon the vocal notes; for, acoustically, we may consider them as part of the "variable cavity" under consideration.

"Tracing the volume of sound in its ascent," says Sir Charles Bell, "from the glottis, we see how well the epiglottis is calculated to direct it in the passages above. Immediately over the glottis hangs the velum. The velum, uvula, and arches of the palate, vary their condition during the production of simple sounds."

"The bag of the pharynx is a flat expanded web of muscular texture extending from the base of the skull to the extremities of the os hyoides and cornua of the thyroid cartilage, between which it is stretched and held out. If we trace the pharynx upwards from the closed extremity of the œsophagus, we shall find it terminated in front by the mouth, and above by the posterior nares.

"Considering the vocal passage as one irregular cavity, extending from the glottis to the lips and nostrils, we shall find it subject to great changes, and powerful in its influence on the voice; for, although the breath is vocalized in the larynx, the musical notes and the vowels in speech are affected by the formation of this cavity."

It is a fact that when a person who has divided the pharynx, and exposed the top of the windpipe, attempts to speak, no sound issues from the larynx. By great effort he may produce a noise, but anything like the common effort of speaking, is unattended with any audible sounds. Hence we must infer, that the delicate vibrations necessary to articulate language, are influenced not merely by the action of the glottis, but also by the conditions of the walls of the pharynx. This cavity, like the flute, is lengthened in *grave* sounds and shortened in *acute*, and though the note is made to

rise and fall to the agency of the vocal chords, the full development of its qualities can alone be produced by this apparatus; for, as the tube of the organ pipe is adjusted to the reed, so is the condition of the pharynx made to correspond with the contractions of the glottis.

In pronouncing the simple continued sounds, the vowels and diphthongs, the pharynx, at all times irregular, narrows its form and dimensions, without interrupting the sounds. The vowels are universal and expressive. In forming the consonants which are conventional, the pharynx is a very principal agent. The substitution of this smaller cavity for that of the thorax affords an immense saving of muscular exertion, for a little practice and observation will show how utterly impossible would be continuous speech, were every impulse of accent given by the chest. This will be proved to demonstration, by a consideration of the analogy existing between the thoracic cavity and the hydrostatic press.

"In a patient," Sir C. Bell relates, "who had lost the bones of the upper part of the face, I could look down behind the palate, and I saw the operations of the velum. During speech it was in continual motion, and when the person pronounced the explosive letters, the velum rose convex, so as to interrupt the course of the breath in that direction; and when the lips parted, or the tongue separated from the lips or palate, the velum recoiled forcibly."

The pharynx, a large dilatable bag behind the palate, and moveable by many muscles, receives the volume of issuing sound from the glottis below; and although it opens into the nose above, yet this passage is closed whenever the velum is raised like a valve; at such a time, if the mouth be also shut, the bag will be closed on all sides, and may then suffer distention by the ascending vocalized breath.

In enunciating the vowels and diphthongs much of the sound is the uninterrupted issue of the vocalized breath, modulated by the passages, and differently directed, but not checked or interrupted. The consonants are the same sounds interrupted, and at the moment of this interruption the pharynx is prepared to give an appulse by its muscular action, exactly in time with the parting lips.

If we grasp the throat whilst speaking, we feel each articulate sound to be attended with an action of the pharynx, and preceding each explosive letter we shall be sensible of a distention of the throat. By a close attention to the act of breathing, we shall perceive that whilst the distended chest falls gradually and uniformly, the bag of the pharynx is alternately distended and compressed, in correspondence with the articulate sounds.

"Without the action of the pharynx," quoth Mr. Bell, "those letters must have been mutes, which, through its operation, give the greatest distinctness to language," i.e. the semi-vowels.

These are *b*, *d*, *g*, and *n*, and are distinguished from the corresponding mutes, *p*, *t*, *k*, and the liquid *m*, by a murmur in the throat, this murmur, like all other sounds, proceeds from the glottis, the air ascending whilst the pharyngeal bag is filling, and a partial escape of it through the nares being permitted by the connivance of the velum pendulum. The consonants are formed in the following manner, according to Mr. Bell:—

"*P* is formed by the lips, stopping the current of breath; no sound is given before the parting of the lips; it is the vowel abruptly sounded by their separation; in the formation of *b*, the antecedent murmur already described is perceived.

"*T* is formed by the top of the tongue touching the lower part of the upper gum, and thus obstructing the vocalized breath. *D* is formed in the same way, but is preceded by a murmur.

"*K*, *c* hard, and *q*, are formed by the back part of the tongue stopping the current of sounding air, and *g* hard is formed in like manner, but with the antecedent murmur.

"*M* is formed by the lips interrupting the current of air; and *n* by the top of the tongue touching the upper gum, the murmur preceding the last consonant.

"*F* and *v* are formed by the upper teeth being slightly pressed by the lower lip.

"*J* and *g* soft are produced by the back part of the tongue stopping the current of breath.

"*H*. In the forming of this letter, the flattened tongue is approximated to the roof of the mouth, simultaneously with a combined impulse of the breath by the pharynx and thorax.

"*L* is produced by the tip of the tongue touching very lightly the lower part of the upper gum. *R* is formed by the same conformation of mouth as *l*, but with the aid of a slightly vibratory action of the tongue.

"*S* and *z* are produced by the teeth very

little separated, the *s* differing from the *z* by a greater flattening of the top of the tongue, and a stronger impulse of the breath.

"*W incipient* is made by a slight protrusion of the lips. *W final* is always silent. *X* is no more than a combination either of *k* and *s*, or of *g* hard and *z*."

If we attempt to articulate the mutes and semi-vowels in a whisper, we shall with difficulty distinguish them.

The consonants, classed according to their formation in the mouth, have varieties consequent on the action of the pharynx. These, formed, 1st, by the closed lips, 2. By the meeting of the lips and teeth, 3. By the tip of the tongue and palate, 4. By the dorsum of the tongue and palate, all admit of variety; by the operation of the pharynx and velum they become mutes, semi-vowels, and nasal liquids.

There are obviously two sources of the forces with which words are uttered—the chest and the pharynx. The emphatic delivery of sentences must proceed from the forcible expulsion of the breath by the effort of expiration; but the emphasis on the single syllable, that is *accent*, and the forcible enunciation of the letter on which the clearness and distinctness of words depend, must be produced by the contractions of the pharynx.

The late celebrated orthoepist, Mr. Walker, found a mare's nest, which he designated "the *inflexion* of the voice." He chose this term *inflexion*, from some imaginary analogy between this quality of speech and the musical gamut; but this was entirely illusive; the effects which he thus named, proceed entirely from the difference between the *suspensive* pause and the *final* pause. Preparatory to speech (as indeed to every other exertion) the speaker dilates his chest, and during elocution his respiration is limited. When the suspensive pause is produced, this dilatation of the thorax is kept up; but when the final pause occurs, a collapse of the chest takes place, and a full and free inspiration follows, very different from those short and almost imperceptible breathings which sustain enunciation. Speech is an effort of volition, and volition is the result of conception. The speaker having designed each effort he is about to make, prepares his vocal organs by an adequate inhalation.

Mr. Cull, and some other orthoepical writers, have imagined that voice and even speech may be produced during inspiration, and in this way they attempt to explain ventriloquism. This is a mistake; the organs are so formed that it is acoustically impossible to vocalize the *inhaled* breath. The writer of this article has seen Mr. Love, the polyphonist, go through his ingenious performances, and is convinced that the deceptive sounds are produced by an unusual dilatation of the pharynx, synchronous with the elevation and folding back of the apex of the tongue towards the velum palati. By this means an extraordinarily large cavity is produced, which alters the resonance of the voice, and gives the idea of distance, &c. The articulate and other sounds are brought out by the *falsetto* actions of the tongue and pharynx, of whose muscles every fibre has, by long study and practice, been brought under command.

Mr. Cull himself ejaculates a series of sounds imitative of the effects of fear upon the female voice, and which he considers to be inspiratory sounds. He is, however, totally mistaken; they are produced solely by expiration, and their deficiency in fulness is owing to the *extremely contracted state of the thorax* not allowing sufficient breath to give the notes their perfect expression. The instantaneous effect of sudden fear is a collapse of the chest, and the cacophony of the voice is entirely due to this cause. All the depressing passions, indeed, induce contraction of the thorax, and the exciting one's dilatation. A full inspiration is indicative of courage. The truth of these observations will be obvious to any one who will take the pains to remark the ordinary occurrences around him. Who can be ignorant of the trite expression used by every one after mental suspense or fear, "I can breathe again"?

We must in justice declare, however, that Mr. Cull is a most excellent elocutionist, though he may not be right in this particular point of physiology.

From the *physiology* of the voice we may now advance to the consideration of those painful affections which form the more immediate subject of the book before us.

The impediments of voice and speech may be viewed as proceeding from three causes, 1. Congenital malformation; 2. Structural disease; 3. Functional derangement.

"Impediments of speech, says Mr. Bell,

have been classed under the two heads of malformed organs and functional derangements of perfect organs. In order to ascertain the division to which any particular case may belong, it is our first duty to ascertain if the patient can read or speak when alone, or when under no excitement or embarrassment; for if there be the power to read or speak under such circumstances, it is only one of functional derangement; but if, on the other hand, the patient stammer under every circumstance, we may be certain that it arises from malformed organs. Having ascertained this, we have now to discover whether it be of the voice or speech. If the patient find a difficulty in producing voice, and when formed has no control over its continuance or pitch, we may refer the defect to its organ, and it will be found to exist in the glottis, where all power of volition is either uncertain or lost; and, on the contrary, if there be no difficulty in producing voice, but merely a want of power in giving to that already formed the characteristic properties of lingual utterance, the defect may be referred to the organs of enunciation."

The alterations of structure which disease produces, and the influence of these alterations upon the vocal sounds, are subjects of interest to the pathologist, but are beside our present purpose.

Congenital malformation of the glottis, whether producing *cacophony* or complete *aphonia*, must be considered as incurable; but malformations of the parts concerned in speech need not entirely be despaired of, nature supplying occasionally in these instances a kind of compensatory arrangement. The writer is acquainted with a Methodist minister who has a fissure of the bony palate in its whole length, and extending through the velum pendulum palati. Yet this man continues to make himself distinctly understood from the pulpit, and is popular as a preacher. In this case the fissure is wider than usual, the tongue is exceedingly thick and large. The inferior spongy bones are flattened and expand outwards, forming an imperfect roof, against which the tongue acts in utterance. The tongue is also capable, by ascending through this fissure, with the assistance of what remains of the velum on each side, to almost completely shut up the posterior nares. The tones of his voice are certainly not of a good quality, but they are sufficiently distinct for the purposes I have described.

Mr. Bell, in the book before us, enumerates several kinds of impediments of speech, or of defective enunciation,—stammering arising from various causes, harsh pronunciation of the consonants, hissing, perverted nasal enunciation, the Northumbrian burr.

In the stutterer, the fault is in the want of combination, whilst he cannot combine the murmur from the glottis with the pharyngeal actions; he can whisper, he can articulate the faint sound of aspiration, whilst he cannot vocalize the breath at the same time. So he can sing his words without hesitation, or impediment, or spasm; because in singing, the adjustment of the glottis, and the due propulsion of the air by the elevated chest, are accomplished, and continue uninterruptedly. Neither does he experience any distress in making the vowels and liquid consonants, from the same reason; and if he commence his speech with a vowel sound, he can generally add to the vibration already begun, the proper action of the pharynx. Dr. Arnott has taken advantage of the fact, that patients could utter a series of musical notes and combine them with articulation; he observed, that a sudden stoppage of the voice took place by a spasmodic closure of the glottis occurring the instant the patient attempted articulation. By teaching the patient to dwell upon a particular note or sound, he enabled him, after a few efforts, to combine it with articulation. Thus, in pronouncing the word *bad*, he would form it in this manner *eĕb-ad*. In this way every contumacious consonant may be mastered. The ill-management of the breath, upon which Mr. Bell dwells at some length, arises from a want of power in forming another necessary combination, that is, between the expiratory contractions of the thorax, and the articulate actions of the throat.

He expels his breath so much in his attempts at utterance, that to produce a sound at all, the ribs must be forcibly compressed. To remove this necessity, if he be made to fill his lungs and elevate the shoulders, the elasticity of the compages of the chest will come into play, so as to expel the breath without effort, and he will speak with facility.

To fill the chest, to pitch the voice, to keep a measured time in speaking, to raise the voice on a liquid letter or vowel; these are the principles of Mr. Bell's method. He thus writes on the subject:—

"Were the analyses of vocal sounds well understood, an important fact would be manifest: that though an opening of the mouth ought to precede all articulation, yet such opening is not made by the majority of readers and speakers. The want of this preliminary motion in one class, produces indistinctness, and in a smaller class, combined with other causes, it produces stammering, or greatly tends to form that impediment. We may fairly assume that the want of a proper position from which vocal action may proceed, is the first *bar* to clear utterance, and leads to those distortions of the features and contortions of the muscles which accompany the efforts of the stutterer.

"Without certain positions, from which all the actions of the vocal machine should commence, there can neither be distinct nor graceful articulation. Nor is distinct articulation the only benefit; by attending to them the breath is pleasingly inhaled and emitted, and the whole body harmonizes with the vocal process.

"I may state without fear, that I am the first who has discovered the importance of two simple positions, the *use* of which will add greatly to the beauty of speech, and the ease of the speaker. My discovery I have presumed to designate '*first and second positions of vocal action*,' these are chiefly addressed to the eye, and are thus formed.

"The *first position* is a slight separation of the lips and teeth. The advantage gained by this is a free inhalation and emission of breath; for observe, that the process of breathing cannot be impeded but at the expense of ease and gracefulness. If the lips be closed, the current of breath must necessarily pass through the nostrils, and the consequences of this unnatural passage are uneasiness and distortion of the features.

"The *second position* is more complicated. The first is a position of rest, the second is a position of motion, and it ought to precede all articulation. The second position is formed by a simultaneous action of the lips and teeth. The common error is in confining the action to the lips, and keeping the teeth inactive. By this action of *one*, instead of the simultaneous motion of *both* these organs, no distinct utterance can take place, and the lips are contracted in speech, as a purse is closed by the action of strings.

"No sentence, no word, not the simplest element of sound, can be *properly delivered* without a strict and uniform attention to these two positions. The *first* being the position of rest, must be adopted at all the pauses, whether of the major kind, as the period; or minor, as the comma. The *second*, namely, the farther separation of the lips and teeth, must precede and accompany all vocal sounds."

Mr. Bell gives us a detailed description of the various vocal impediments to which a portion of the human family is the unwilling heir, and elucidates very happily the theory of their formation and the principles of cure. This constitutes the first part of his work, and from the quotations made we may form an adequate idea of the research employed in its production. The second part is taken up with the practical application of the principles developed in the first, and it is but just to say that the several rules adopted, the tables of enunciative difficulties compiled, and the series of exercises formed for the assistance of the patient, indicate a sound acquaintance with the philosophy of the subject, and great practical skill in directing the powers of the sufferer to a successful attainment of his object.

There are other points of view besides the benevolent one under consideration, in which a knowledge of the principles of vocal and articulate language would be highly interesting. An important clue to the early condition and connections of primitive nations would be afforded by an analysis of the laws which regulate the mutation of consonants. That these mutations may be reduced to a few simple principles, even a limited knowledge of languages will convince us. We know that the articulate changes which the Portuguese, the Spanish, the Italian, and the French tongues have undergone from the Latin, and those of the English from the Low German, may be reduced to definite rules; so may the variations of the Latin from the Greek, and of the Greek from the Sanscrit. Were these speculations successfully pursued, their effects upon some subjects which are at present in the depths of obscurity would be highly enlightening and useful.

LETTER TO HIS EXCELLENCY

LORD MULGRAVE,

THE LORD-LIEUTENANT OF IRELAND, ON THE CONSTITUTION OF THE

DUBLIN COLLEGE OF SURGEONS.

My Lord: I should not address your Lordship on the present occasion, did I not give you full credit for holding liberal opinions, and entertaining a desire to renovate the institutions of the country, and did I not, at the same time, see you about to be placed

in a position which is quite hostile, as I am convinced, to the honest inclinations of your Excellency. I do not myself approve of this mode of communication with you; not that I shrink from personally avowing what I have indited, but my motives in that avowal would be open to misconstruction. I am reconciled, however, to the transmission of an anonymous communication, by the fact that I address a nobleman who does not act from hearsay or report, but exercises a judgment which is directed by an intellect of no common order, and one which the owner has no indolent disinclination to employ.

Your Excellency yesterday visited the College of Surgeons, and was pleased to express much satisfaction at what you there witnessed, and you are reported to have declared your intention to frequently visit that institution; probably, you are but little aware of the nature of that College, or the sinister uses to which your Lordship's visit will be perverted. It, therefore, is only proper that you should have the means afforded you of duly estimating both. To provide these, the author of this communication adopts a step which might otherwise appear impertinent, or even improper.

The College of Surgeons in Ireland has had the singular good fortune in these times to hold in public estimation a reputation for liberality and scientific attainments, although there is not perhaps in the entire kingdom an institution, in which, in proportion to its means, schemes of jobbing have been carried on with greater hardihood, or for more selfish purposes, unredeemed by any good quality or talent in the perpetrators, and productive of no public benefit whatever. There is not, in fact, a single department of the institution, a single appointment in its school or its board room, in which corruption does not form a striking element.

The College, my Lord, has been for some years, and now is, entirely ruled by a selfish clique, who are enabled to preserve their authority by the influence of an old and vicious system, directed by the hand of cunning, vanity, and bigotry. It is true that in this party, which is nothing but a faction, Catholic and Protestant, Tory and Liberal, are banded together; but they have agreed to forego religious and political feeling; from motives of personal interest, from the sordid desire of aggrandizement, and in order that they may be enabled to use the College more effectually as an engine of private emolument and professional advancement. Out of doors, where their respective interests no longer suggest such self-denial, they, one and all, return like the dog to his vomit, and exercise that bigotry and party spirit of ill-will, which so effectually poisons every source of happiness in this unfortunate land.

The chief means of abuse connected with the College is the school which is attached to it; the whole resources of the institution, and the entire interests of the profession, being made entirely subservient to the success of that appendage. As a national school of physic, its position is contemptible and unworthy in the highest degree; while, instead of yielding remuneration to the corporation, it absorbs a considerable portion of the revenues of the College, thus diverting its funds from the vital concerns of the profession and of science, which are consequently left to pine in neglect. To enumerate the host of evils engendered by the school would be impossible in the space of a letter; suffice it for the present to say, that it is an injury to the whole community, and even seriously impedes the very department which it professes to aid, namely, that of medical education. It places the junior members in general at a hopeless distance from all honours and emoluments. These are reserved by the College for a select few, —for those who, though young, are skilled in corporation *tactique* and intrigue. The consequence is, that almost all the members who have recently been admitted have been stoutly opposed to the present *regime*, while a very considerable proportion of college funds depends on the admission fees of new members. Thus the College possesses an element of self-cure within its own constitution, if it were allowed free operation, which would soon remove all its imperfections. That, however, would not suit the purposes of the usurping corporators, who forthwith declare that the College of Surgeons in Ireland is closed against all new members, however qualified by law or scientific attainment, – although these individuals have been induced to enter the profession, upon the faith of treaties which seemingly place this natural object of their ambition quite within their reach, although to this moment every licentiate thus excluded holds under the seal of the College an acknowledgment of his perfect eligibility.

But how was the deficiency in the College revenues, consequent upon this lawless proceeding, to be made up? If the faction were as quick and sagacious in the pursuit of science as in financial contrivances, our College would not hold the contemptible position in the philosophical world which candour compels me to admit that it does at present. An expedient which was quite satisfactory to those who devised it, but most fatal to those public interests which they so scandalously betray, was soon devised. "If the College," said they, "is to be deprived of fees on the admission of members, it must facilitate the sale of licenses, and thus strike a balance in the cash-book. To accomplish this, the examinations must be rendered more easy, thus at once imitating and antagonizing the College in London. By having some of our professors

in the Court, those professors may thus examine their own pupils in what was perhaps taught them on the day before, and appearances may be saved by associating with them a few picked men, who are up to our mode of teaching, and approve of our system." Thus as the engine goes round, a number of half-taught persons are poured out upon the profession and the public. The fatal result, – if the evil destiny of medical science in this country is to suffer the continuance of so vicious a system much longer,—will easily be conceived. But what are we to expect if we find that system receiving the weighty sanction of your Excellency's name, for to such purpose tends the present marvellous and unprecedented outbreak of loyalty on the part of the College. Already do the faction exult at what they regard as the successful issue of the imposition which has been adroitly practised upon your Excellency. Now they behold nothing in the vistas of their imagination, but the aggrandizing results of patronized corruption and intrigue, rampantly triumphing over the efforts of the crest-fallen reformers, who before conceived that they enjoyed the countenance of the representative of a reforming government. They are welcome to their triumph, for imaginary and momentary it must be! Assuredly this *auspicious* visit will lead to a result most opposite to their hopes. May not the reformers in this Augean stable now look with confidence to your Excellency's discriminating judgment and unflinching horror of monopoly? Surely their cause will now have an impartial hearing. Their demands for reform can no longer be cried down by noisy shouts, or overruled by usurped authority. Your lordship's attention has been pointedly directed to the College, and to deceive you we trust is impossible. The tribunal before which each party comes has but one avenue, and that is guarded by reason and justice. My Lord, it may appear almost mean to refer to the banquet lately provided for your Excellency, but as it was the occasion that led to these remarks, and as it furnishes a striking illustration of the *ordinary* conduct of the party under review, I may be excused for drawing your attention to it.

Can your Excellency imagine that *the College* itself had not the honour of entertaining the Lord Lieutenant on that occasion? That *the College* did not appear at the feast? That *the College* was no party to the event? Yet such is the fact. It was *a faction* that had the unspeakable audacity, in this "ebullition of loyalty," to make your Excellency share in a flagrant breach of the charter, the by-laws, and the precedents of the College; and this for the purpose of seating themselves a little more firmly on their tottering thrones.

Such sentiments as are contained in this letter, may be new to your lordship, but they are not now expressed or even printed for this time. You will hear them boldly contradicted by some; you will hear them ascribed to party spirit and jealous disappointment, by others; you will probably *not* hear them confirmed by Mr. Crampton, who, though he cannot or will not contradict them, may, perhaps, possess too much of the disposition of the courtier, to dip deep in such troubled water. You will certainly *not* hear them echoed by Mr. F. White, or Mr. Colles, or Mr. Cusack, or Dr. Jacob, whose interests and agency are deeply involved, in the existing order of things; nor yet from Mr. Harrison, who reserves all his powers to second, with noisy effort, your Excellency's honest endeavours to reform the Dublin Society, with which he has little or no concern, and in which he possesses certainly no influence, but who, strange to say, pursues an entirely opposite system in the College, where, if his efforts were properly directed, he might be able to effect some beneficial change. But your Excellency will find abundant confirmation of these and many other ugly truths, by taking the trouble to refer to the following gentlemen, viz., Messrs. Carmichael, O'Beirne, Read, Ellis, Small, Brenan, Tagert, M'Donnell; and though last, not least, Mr. Warburton, M.P., who I have good reasons for believing, must hold similar opinions to those which are entertained by the other gentlemen now mentioned. This list, short as it is, includes Whigs and Conservatives, Protestant and Catholic, Dissenter and Churchman, and, of course, furnishes a complete refutation of a common assertion of the faction as to the motives of the reformers.

But I have already obtruded too long upon the attention of your Excellency, though the subject is by no means exhausted. In conclusion, permit me to reassure you that an imposition, partly collegiate and partly political, has been played off upon your Excellency, and that every medical reformer in Ireland considers that your Excellency is bound to make due inquiry into the actual condition of the institution. Reformers desire nothing more than that the subject of its government may be fairly investigated, and they do not desire an abler or more dispassionate arbiter of their grievances than your Excellency. I remain, with all respect, your Excellency's very humble servant,

A Member of the College.

Dublin, June 4, 1836.

At a late concours for the office of House Surgeon to the *North London Hospital*, the successful competitor was Mr. William Hallam, of Newcastle under Line.

Erratum.—In the letter headed "Hambledon Union," page 274, col. 2, line 19, for *universal* read *unusual*.